

Kolar Gold Fields:

Encountering tourism through contemporary
surveying and prototyping technologies

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Abstract

In the wake of post-colonial theories within globalized economies, tourism industries have been redefined to accommodate ethically aware travelers. The thin line between well-intended interest in hosting communities and recapitalization of indigenous knowledge pledges for reinspection of motives and actions maintained by the post-tourist in consumption and production of local narratives. This thesis sets intersecting agencies and misunderstandings between the traveler and collaborators from Kolar Gold Fields (India), utilizing rapid prototyping as a method to expose class struggles and problematize their representations. The characterization of democratized 3D scanning and additive manufacturing processes as liberating technologies that disrupt social oppression is questioned through efforts to assemble relationships between artisans and narrators in positioning souvenir production as a political action. Finally, produced objects are situated in-between the collaborators and the traveler as a materialization of the uncertainties in their dialogs. Scanned, printed, and moulded gaps of missing information stand as shared experiences of skills and knowledge, rather than enforced normalization and capitalization of one gaze on top of the other.

Keywords photogrammetry, uncertainty, post-tourism, rapid-prototyping, collaborative art practice, souvenirs, dissensus

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1. Introduction

The following work question how tourism may function as a mode of communication between the traveler and the engaged community through deconstruction and reflection of their colluding agencies within technological apparatuses. Tourism, as a construct of colonial to the neo-colonial economic and cultural stage of confrontation between social classes, is problematized through collaborative production of commodities as a meeting point that depicts local narratives from the defunct gold mining town Kolar Gold Fields (Karnataka, India). Struggles and shifts in the materialization of the project are examined through the historical gaze of the traveler. The relationship between technology and the social is questioned through collaborations between the traveler and the community.

Positioning the tourist entails evolvments of tourism as modes of consumption and mobilization of capital, which are laid towards understanding which position the traveler may hold while engaging an indigenous community. Social and economic power relations between dwelling and traveling identities (Bhabha, 2012; Cohn, 1996; Fussel, 1982; Urry, 2002) are examined through historical reinspection of colonial travel writing (Scholl, 2008) and commercial postcards (MacDougall, 2005), followed by post-modern ethically aware (Urry, 2002) modes of traveling through objects (Lury, 2002) and reflexive performativity (Smith, 2013). Understanding what kind of inner and outer social struggle (Appadurai, 2012; Sontag, 2001) are exposed through the exchange of values may help in reading the fieldwork conducted in KGF.

While the traveler desires extraction of plastic in the production of his gaze within 3D printing, local accounts written in Kolar Gold Fields (KGF) exposes the history of gold extraction both as a symbol of oppressed workforce exploitation and as the liberation of scheduled caste (Nair, 1998; Srikumar, 2014; Srinivasan, 2018; White, 2010). *Why Prototyping?* investigates ways in which increased accessibility and fascination within consumers to industrial production workflows (Gabrys et al., 2013; Ratto, 2011) may question and destabilize (Hertz, 2012b; Sayers, 2018) the use of technology in the preservation of power hierarchies and social order. Using extruded point-cloud mapping to question (Steyerl & Keenan, 2014) rather than authenticate a particular gaze, gaps of information revealed through misunderstandings in the conversation between the different actors may be solidified as missing data (Steyerl, 2012), countering the capitalization of knowledge.

Towards the analysis of the failed attempt to construct hierarchical production team by the artist and the participating community, in *Collaborative Approach* meeting points unfold (Deleuze & Strauss, 1991) as agencies of both the dwellers and the traveler are maximized (Czarniawska, 2004; Leavy, 2009) and aestheticized (Kaitavuori, 2018) through separation (Rancière, 2010), reflection (Bruce, 2015; Kiljunen & Hannula, 2002) and negotiation. Through the discussed prisms, artistic collaborations are situated in-between the actors (Latour, 1999), tracing tensions between the colonizing gaze and the local narratives.

Finally, the case study of this thesis situates a student traveling with a 3D printer as the white savior (Lindroth & Sinevaara-Niskanen, 2017) that tries to counter economic and cultural oppression of the community with grassroots operation and commodification of emerging technology. *The failure to understand the complicated situation with and within the community shifts the focus from souvenir manufacturing as mimicry of capitalist practices* (Bhabha, 2012) *to barter-based encounters*, which consists of special event-based skills sharing through local accounts and their interpretations.

1.1 Motivation

The following paragraphs portray the evolution of my artistic practice through collaborative and reflexive usage of technological devices, sensing my place within society. Ever since late childhood, when my parents decided to leave the small collective community to an urban settlement, I was going through different degrees of struggle in communicating with others. Conversations seem like a burden to be avoided or passed by the minimum effort needed for engagement. Introduced by a friend in the early teenage years, the camera felt like a mediator from which my position is comfortably fixed as a technical operator. Taking part in the operation of a community TV channel, I could challenge my insecure nature by engaging the social through a local media service. Several years later, the triangular relationship between the camera, the self, and the society turned political, positioning camera operation as a service to mediate between oppressive and oppressed communities.

As recruitment for the obligatory army service was approaching, I intended to professionally develop my relationship with the image, yet the authorities had other plans. Placed right in the heart of the Palestinian-Israeli conflict as supervisors in the border crossings, we were taught spoken Arabic for managing disputes and settling misunderstandings between soldiers and civilians. Witnessing the many injustices within the direct contact between Israeli soldiers and Palestinian civilians, together with my unit commander, I have established media-based solutions to reduce direct engagement to the minimum. Through the development of Arabic-speaking instructional videos and database analysis tools, we succeeded to significantly reduce the time needed for Palestinians to acquire medical, work, and general travel permits between the West Bank and Israeli territories, saving many from humiliating interrogations. The humanitarian set of gestures helped the military contemporize the system, freeing human resources for other channels of civil oppression. The contradictory nature of acting through and against a privileged position marked the first moment from which I set to explore the role of the imaging device in mediating between the self and the social status.

In pursuit of an academic degree in photography and education, I have approached communities within the neighborhoods of Haifa (Israel), striving to learn about their social structure and telling their story. While beginning to establish my photojournalistic approach, it seemed that after months of intensive fieldwork, I was still stuck in primal prejudices of their identity. This situation led me to develop collaborations with the neighborhood inhabitants, accommodating their agency and interests through the process. In one case, a woman whose husband was incarcerated commissioned an exclusive music video for him, dancing to their beloved songs in the living room. This small gesture led to a thorough dialog with the couple, exposing ways of living, and communicating in this situation.

Further development of the collaborative approach positioned me as a facilitator in a reactionary video production that investigated the role of the camera operator as an executive of state-oppression. In 2010 Knesset member Avigdor Lieberman drafted a series of laws that legalizes the loyalty of the citizens to the country by attachment to Zionist values, targeting the Arab minority. One section suggested that the government should confiscate citizenships of those who refuse to sing and stand behind the national anthem, which in turn dictates Jewish exclusivity to the territory. Enacting an executive authority of Lieberman, together with a composer and participants of a municipal conservatory, the recorded concert aimed to educate the public through imitation and interpretation of parliament member's own ability to perform the anthem. The recording was later aired in several Israeli broadcast channels through the 2013 parliament elections. Although carrying a rigid concept rather than dialogical, the collaboration between

professionals and amateurs was reflected in the challenge of professionally imitating inaccurate singing skills and translating the results back to musical notes that are readable by amateur musicians. Furthermore, exposure of the work to the public by accessible channels engaged a public discussion on the topic through amateur memes and professionally produced alterations.



Figure 1 *Hatikvah: Revised* (One channel video, 2013)

More recently, I set out to develop dialogical meaning-making with my neighbors, altering power relations between the camera operator and the collaborators through accommodation of contemporary prototyping technology. In *Under Extrusion* (2016), photos that portray sensitive and intimate situations between the collaborators were materialized as low-resolution reliefs. The resulting volumes both implicate my fascination of extruding plastic and manufacturing my gaze, along with the inability to fully control the DIY 3D printer. Secondly, poorly kept by the amateur, the machine essentializes the situations without revealing the identity of the participants. On other occasions, participants took control of the camera and orchestrated portrait sessions of me within their surroundings. Signifying the character of the communication without concretizing dominance of a confident gaze afforded higher expression of agency by each collaborator.

When approaching the materialization of the case study, I aim to adopt a self-contradictory method of misunderstanding my position in Kolar Gold Fields through both practicing exaggerated agency of a neo-colonist, while delegating and sharing control of imaging and production processes to undermine the former. In simultaneously practicing my gaze as a tourist/researcher/artist, negating it with the lens of the collaborators, and then tracing the differences between their narratives through the materialized collusions, I wish to understand what kind of communication we can achieve after destabilizing possible class and power structures.

2. Positioning the Tourist

This chapter marks the relations between culture and economy through several evolvments in the field of tourism to assess the challenges that appeared within the analyzed case study. Against the static definitions of the *west* and the *other*, there is a chance for reading colonial and post-colonial writings through potential slips, exceptions and counter-systematic agencies, that may suggest a somewhat ambiguous approach to travel and tourism.

Already in the late 18th century, colonists agreed that society can be defined and represented by facts, and “administrative power stemmed from efficient use of these facts” (Mohanty, 2003, p. 4). The British planned to conquer the Indian space through translation to classified fields. A robust administrative power would result from the efficient use of facts. By setting up science-laden epistemological space, they could specify the unknown and the strange knowable, hence valuable. (Cohn, 1996). The classification practices evolved through parallel modes of operation that Cohn defined (1996) as *investigative modalities*. Through the *Observational Modality*, the traveler follows preliminary established trade routes, aiming to identify and re-consume sights that can satisfy European eyes (Cohn, 1996, p. 6). The defined significance of certain artifacts is then arranged into socio-economic context and judged between popular culture and the sublime to assert proper value. Systematic investigation of these features was developed in parallel with the *survey modality*, by exploration and classification with different technologically driven practices: from geological and cartographic studies to recording architectural sites of historical significance (Cohn, 1996). The resulting classifications were later archived and used for increasing control over value mobilization and governance across India.

Although traveling associated with leisure, several post-colonial studies exemplify the diversity of motivations behind it (Mohanty, Bassnett & Nayar, 2003). Paul Fussel defines (1982) specific travel modalities in which travelers are typified, concerning the different ways they wish to practice capitalist modes of production and consumption. According to Fussel(ibid.) *Explorers* look for the undiscovered or the unknown, while the *traveler* is interested in what was already processed and defined by historians. Lastly, the *tourist* led by what has been already reinterpreted as a commodified pleasurable and easily digestible experience by entrepreneurs such as organized tours and souvenir shopping, resting in the comfort of a pure cliché (Bassnett, 2003, p. 6). These modalities may be imagined as a need, each eager to reach its consumable fulfillment.

Travelers enjoy an *intimacy of observation*, which challenges any chance of escaping articulations of knowledge. This catch is rooted in the freedom of the gaze, which is established by the degree of security in the position one is watching from. The gaze traps one in cycles that reinvent ways of objectification and commodification (Ashcroft, 2009), encouraged by the pleasure of predicting what something may become within the bounds of the familiar.

In placing the traveler as an amateur anthropologist, the need to domesticate exotic cultures may be affected by a feeling of *homelessness*, treated by a self-assuring mental practice of dividing the world to familiar and alien to reduce emotional anxiety(Mohanty, 2003; Scholl, 2008; Sontag, 2001). This anthropological doubt is propelled by one’s exploitation of their intellectual foreignness to their hosting society. For Claude Lévi-Strauss (2012), anthropology can never have a complete conception of studied

communities. It *can only trace the researcher's knowledge and ignorance within the prism he or she is looking through*. Within this prism, mythical and scientific notions hold the same qualities and are treated equally as mental operations. When the unusual finally finds its place within a familiar and ethically satisfying structure, it is no longer relevant as a subject. Thus the researcher acts as both a preserver and a destroyer of the alien (Sontag, 2001, pp. 53–58). This observation may enable a parallel conflictual reading of both colonial and post-colonial experiences. Although the early 20th century travelers produced their accounts within the bounds of consumable entertainment, further analysis may reveal additional motives behind the documentation.

Travel writing has its roots in comparative observation through the author's systematic understanding of their origin. The foreign is constructed as a contextual stand and a historical foundation within translators' need to justify their experienced cultural difference with the other by domesticating the conflict. Harriet Martineau wrote her accounts of Egypt, Jordan, Palestine, and Syria after visiting the areas with her friends, elaborating mostly on her struggle accepting the position of women and slavery amongst these societies. In analyzing Martineau's Eastern Travel writings, Lesa Scholl (2008) exemplifies the traveler's need to differentiate the other as a method to resist their home-bound morals, while suggesting their own. By this approach, *a practical translation would occur only when a translator questions their cultural perspective in context to what they read and describe*. Secondly, the historicization of a place metamorphoses through both the translator's gaze and the reader's, unknowingly using comparative measures against their heritage, including gaps in linguistics. Thirdly, *the translator would always consciously and unconsciously struggle with differentiating first-hand experiences from their imagined conceptual essence*. Both translators and travel writers run into the same obstacles, although the latter may produce even more significant differences due to the subjective nature of it (De Man, 1985; Scholl, 2008, pp. 107–111). More than anything else, both controllably and subconsciously, translation is a way to prove a conflicted type of relationship between original and visited cultures.

The conflictual state within the writings supplies an opportunity for the readers to place themselves around similar dilemmas. Martineau's *inability to assimilate* into her hosting cultures seem to form the anchor of her unique point of view on the east. This is exposed when she protests sex slavery in the Harems, seeing the dancing women through the western stereotype of "fallen woman":

"There was a booth with dancing girls; a horrid sight, which we are glad to turn away from. So hideous a creature as the one who was dancing, I have never seen"
(Martineau, 1848, p. 129)

Class division in the 19th-century Victorian society was symbolized by women prostitution as a differentiator between lower and upper classes. The sexual character of the dances seemed to Martineau as a clear separation between motherhood and sexuality (Scholl, 2008, pp. 116–118). Not being able to imagine her class privileges within the Harem made her criticize its whole essence:

"I told them I had written many books... I have built a house... I had plenty to do... I had told them in what way, but they could not make anything of it... There is nothing

more about which the inmates of hareems seem to be so utterly stupid as women having anything to do.” (Martineau, 1848, p. 166)

The inconsistency in position within Martineau’s position signals on accounts that are *different from typical colonization efforts to exoticize and domesticate the savages*. Here the author shows no *deliberation*, sans exposing her inner conflicts through the writings.

This was clarified in an answer given to a publisher request for a 2nd edition revision. Martineau stated that the initial observation made during these visits should be kept *intact to preserve the authenticity of the text for a better critical analysis of her as an actor within these power structures*(Scholl, 2008, p. 118).

When looking at the success of commercial postcards at the beginning of the 20th century, one may assume that they were a primary source of information to western consumers about colonized people. The postcards contributed to the maintenance of stereotypes along with the colonized societies, using the practice of anthropometric photography. Within this method, people were systematically portrayed, mainly by profile and frontal postures, aiming to (falsely) show social development through physical comparatives(MacDougall, 2005, p. 196). Hundreds of millions were delivered to France during that era, teaching the public on different *native types* within colonized regions under French control(Peterson, 1985, pp. 166–168).

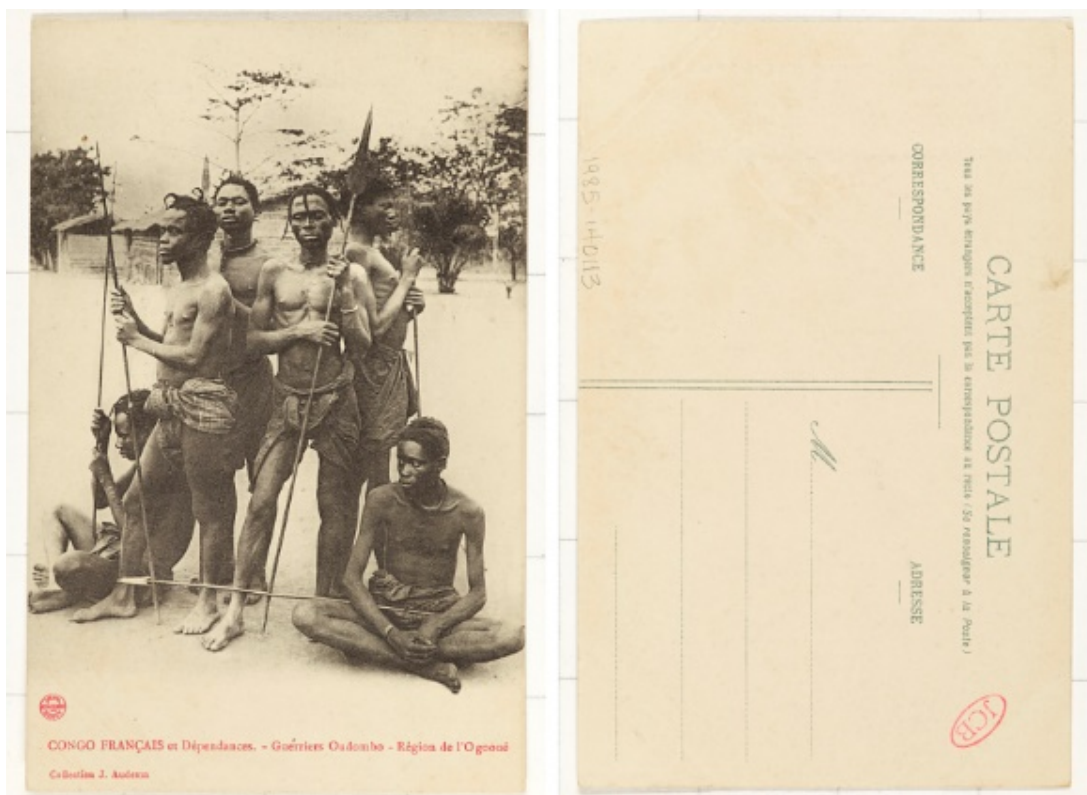


Figure 2 J. Audema, French Congo and Territories - Oudombo warriors - Ogooué region (1905)

In the works of Audema, the villagers are all carefully posed, but simultaneously have space for their expression. McDougall (2005) sees the exaggerated confidence within the subjects, through their varied smiles as a way to respond and create a dialog with the colonizer, *suggesting on the falseness of the*

meaning indicated by the event they were situated in. Villagers in Figure 1 express boredom, alienation, and disinterest, breaking the colonizing objectification. Accounts of his supervisors also note the officer's problematic tendency to engage in personal relationships with his collaborators (MacDougall, 2005, p. 195). Audema seemed to allow and even encourage unexpected behavior from his collaborators, within the boundaries of the colonial commercial knowledge production. He cannot be excused for taking part in it, but at least noted for leaving some open cracks in the system.

While the colonial traveler may have used the notion of homelessness to criticize home morals by experiencing others, post-colonial theory sees intersections of cultures as an opportunity amongst deprived human bodies to resist colonization. Homi K. Bhabha (2012) suggests that a society flooded with over-production of knowledge continuously changes its boundaries affected by its inhabitants' need to continually redefine themselves. Bhabha, who is looking at cultural attributes through the post-structuralist notion of *difference*, claims that "to be *unhomed* is not to be *homeless*" (Bhabha, 2012, p. 9). Travelers, immigrants, and other detached social bodies live on intersections between cultures. The *in-between space exposes contradictions that may act as an opportunity to redefine social relations (Bassnett, 2003) between privileged and unprivileged bodies, on a cultural and a political level, through their desire to take an active part and stretch the boundaries of both their home and host societies.* The western female travel writers of the 19th century have used their unique position to realize both their sexuality and intellectual exchanges on levels they could never achieve back home (Bassnett, 2003). Although on the surface, they may have the stable gaze of the investigating colonizer (Said, 1995, p. 308), to a certain extent their desire to take a more significant part in something is potentially fulfilled within displacing themselves (Bhabha, 2012) into *intimate junctions of unstable encounters.*

Colonial bodies keep their historical, symbolic, and linguistic relevancy by continuously producing a difference between home and foreign, re-categorizing, and redefining the latter. The complete reliance on the *other* may suggest a state of ambivalence and anxiety, rather than stable control (Bhabha, 2012, p. 54). *The traveler's necessity of information to define someone within an event may call an opportunity for a resisting force.* This is an intimate condition in which one cannot fully recognize the other due the colonized insisting to not fully reveal who they are or what they stand for (Bhabha, 2012, p. 13). Bhabha defines this as a *hybrid space* in which the colonized uses (both consciously and unconsciously) *the weakness induced by anxious colonial questioning of self-identity as an agency of representation within the oppressing system,* instead of maintaining a fixated position of being othered. One way of undermining the excluding mechanisms is to *mimic* colonial institutional and cultural behavior sabotaging further attempts to define a clear gap between alien and home cultures. Colonized communities surface their desire to become colonizers, reversing the gaze to promote their own economic, social, and political interests. This way, mimicry can be used as a weapon to counter the traveler's fantasies of their identities, enabling a reversal of power-relations. However, it should be noted that any person living within the world of the globalized economy is comprised in some way of two or more cultures with differing power-relations, thus generally this claim is more of a call for action, than an accurate analysis of post-colonial societies (Hollinshead, 1998, p. 38; Tucker, 2014). Thus, to assert any enough force into this terminology, mimicry should be practiced consciously, accommodating colonial patterns through *expanding them by one's mastery* as opposed to being limited by them.

Tourism, migration, and occupation often render definitions of what local culture is obsolete. People are situated *in-between* cultures in their own identity, managing an inner struggle of interests and feelings of belonging (Lury, 2002). This ambivalent and complex situation encouraged researchers in the field of tourism to take careful measures in re-defining what is local, by questioning the definition of a person as fixated native-in-place identity, instead of pointing on the existence of *dwelling* collective bodies, who tend to be less mobile, and *traveling* societal entities, which found to be more in-motion (Lury, 2002, p. 86). This phenomenon is exemplified by the politics of commodities, in which the physicality of objects is defined by the relations between the character of the exchange and value they inherit. *The value of objects may consist of the struggles through which they were made*. Tensions around price, bargaining, and other exchange frameworks originate from the fact that not all parties share the same interest in defining value (Appadurai, 2012). The character of these tensions may visually represent eventuated meeting points of colluding certain types of *dwellers* and *travelers*.

For Celia Lury (2002), objects seem to maintain an equivalent hierarchy of knowingness parallel to what explorers, travelers, and tourists do, reflecting on different types of relationships between dwelling and traveling societies within their physical integrity. On one end, *tripper-objects* are valued more by their destination rather than their origin. It can even be a generic candy box that the traveler kept for as a reminder of the journey. The other end of the spectrum is represented by *traveler-objects*, which always retain their original historical, political, or religious value, asserted by a dwelling community. *Tourist-objects* may best represent this ambivalent in-betweenness, having no apparent connection to their origin, nor specified value in their final place of arrival. They are mostly an aesthetic representation of an event, in which exchange of values occurred between different dwelling and mobile social bodies. These are developed through the lens of *discrepant cosmopolitanism*, which rejects the enforcement of capitalist monoculture advocacy of value mobilization of cultural traits and artifacts while preserving the political tension applied in the exchange of commodities as a leading principle (Clifford, 1992). Thus, the character of information exchange is materialized through the cultural and economic value of the commodities themselves.

This in-betweenness can also be seen through the shift of the tourist gaze in the wake of post-modern theory. The tourist must be fully immersed within an experience to realize its authenticity. In contrast, the post-tourist is already aware of the ethical issues around the tourism industry and cannot situate himself within the dichotomy of a noble-savage relationship, or as an invisible spectator. The *post-tourist* can only partly enjoy guided tours, promotional brochures, and traveling to remote places, wearing the gaze of the explorer and the tourist simultaneously, though from *a critical, cynical and dissatisfied point of view* (Urry, 2002, pp. 85–88). The post-tourist is portrayed as an outsider that may authenticate the type of the experience and soon after looking for a different way to experience pleasure (Smith, 2013).

Finally, Philip Smith (2013) sees an opportunity of acting against this distanced position using corporal performativity to reach a better understanding of the privileged post-tourist gaze. The *agentive tourist* perceives the touristic experience by exaggeration of applying own accumulated knowledge, self-reflection, and shared performative experiences using actor-networks structures of local collaborators, intensifying colluding agencies. The network of communication is a configuration in which places exist through a specific logic that conforms perception of meaning and matter and the relations between them

(2013, pp. 100–106). In English Riviera Global Geopark GeoQuest 2010, Smith used his conception of *derivative*ⁱ walks in planning and executing guided tours and performances based both on local expert knowledge and Smith's background research and initial observation of the place. Walks and performances were scripted, interrupted, and re-scripted in random meetings with street-level passersby that colluded with preconceived narratives. Additionally, Smith used his self-reflection on his initial portrayal of the place as another form of interruption (2013, pp. 133–150). Smith was simultaneously acting as the tourist, the researcher, and the artist, using the three modes of seeing against each other to challenge hierarchical consumption and production of knowledge.

In concluding this chapter, the notion of *in-betweenness* lays both travelers and locals on a site-specific fluid dwelling-to-traveling spectrum. In these junctions, travelers confront their detachment from home while attempting to authenticate it. Dwellers struggle with exploitation due to colonization by the former. The meeting point allows travelers to judge their own morals values by failing to translate the dwellers while allowing dwellers to counter classification by adopting characteristics of the colonizers. These confrontations can be reflected through tourist-objects, which materialize tensions between opposing value exchange cultures, blurring the difference between origin and destination. As the following case study seeks to trace diverse types of encounters between dwellers and a traveler through exchanging information – reading, listening, and deliberate productions of misconceptions become a crucial factor for evaluation.

3. Why Prototype?

This chapter problematizes the usage of plastic in portraying misconceptions and certainties between collaborators through industrial processes. Plasticity is commonly regarded as a process that conveys continuous adaptability of matter and meaning through chemical reconfigurations. As contemporary surveying and prototyping workflows are being democratized and accessed by consumers, mechanical reproduction in plastic affords a way for consumers to solidify gaps of information. Without definite knowledge and operating in-between technology and society, a collaborative operation may suggest an opportunity to imply the place of technology within the community through characterizing the relationship between the operators. Furthermore, in Greek mythology, the ever-changing figure of proteus keeps running away from representing itself in a consistent form to avoid telling seafarers their destiny. The plasticity in 3d printing aesthetically may describe the impossibility in defining a leading narrative when historicizing KGF through the transitional space.

Two opposing perspectives describe the relationships between humans and technology. Technology is both assumed to liberate and inhabit human behavior, disrupt, and control social order. Coined by information-technology researcher Matt Ratto (2011) *Critical making* advocates shared practice-based acts of *making* as a site for conversation and reflection on the nature of society and its relationship with technology, rather than iterating for a final object or accumulating knowledge. The critical scholarship was defined by the Frankfurt school as not only a reflection but also as a call for intervention in society (Hertz, 2012b). For Ratto (2011), knowledge-lacking experiment with assembling and maintaining technological devices may never make us understand how they were built, but with a particular focus may help us to understand on whose expense it was made more natural for us to drive a car or how rare-earth materials got into our phones. The value of DIY production may stem from the struggle in applying our ideas and processes into an unfamiliar field (Hertz, 2012a), that might expose alternative techno-social perspectives.

3.1 Reverse-prototyping

Online social platforms created a world in which users are generating and consuming their content on a broad scale, enabled by more accessible data bandwidth and web-based technologies. Users became the producers of the products they consume – motivated by their need for recognition, freedom, and agency (Gabrys et al., 2013; Hertz, 2012b; Sayers, 2018). The exploitation of consumers and workers by the capitals was partially challenged by the willingness of the *prosumers* to produce and consume at no cost (Ritzer & Jurgenson, 2010). This phenomenon, as part of the *third wave* of capitalism, introduced the illusion of free choice and agency, affected by the decrease in the price of customized manufactured goods. Consumers can assemble IKEA furniture by themselves or choose toppings on their burger in a fast food restaurant, while helping corporates reduce labor costs (Gabrys et al., 2013; Hertz, 2012a). Seemingly holding the potential to challenge capital interests, prosumers mostly adjust to globalized and connected economies.

The *maker* movement has evolved following the establishment of educational maker spaces and the electronics DIY publication Make magazine. These platforms advocated the democratization of industrial fabrication processes, open-source software, and easy to use micro-controllers. They are mostly characterized as an innovative way to celebrate an abundance of technology in the western world,

without leaving much space for questioning its purpose. Open-source software and electronics use the power of collective contribution for making technology inclusive and accessible in lower costs (i.e., Arduino and Raspberry Pi), but then often becomes too complicated for most people to use. The learning-curve often attracts those who wish to practice and master technology, rather than trying to understand their relations with it (Hertz, 2012b). The maker movement appeared to mostly nurture playgrounds of expensive toys for the privileged (Ames et al., 2014).

A document, which in Greek stands as an instruction or teaching, may hold the power of putting something in question, rather than dictating its definition. It may tell more about the teaching itself, or the way it wishes to characterize its connection to a specific event, than representing it (Steyerl & Keenan, 2014). In this regard, taking the limitations of amateur knowledge to perceive technology in complete detail as an advantage, incompetence in operating and controlling technology, and the inability to separate meaning from the material may show something about the nature of the relationship situated between workers, capitals, and consumers (Sayers, 2018). Through this prism, *technology is seen as an attempt to communicate ideas between collaborators, rather than advocating efficiency and other advancements that would not necessarily cohere with social needs*. Technological material inhabits the inherent inability of the amateur to separate it from its interpretation (Hertz, 2012b; Ratto, 2011; Sayers, 2018).

Jentery Sayers (2018) sees an opportunity in assembling, disassembling, and maintaining technological materials collaboratively to reveal how push-button action unfolds to communicate social phenomena. Makeshift technicians who try to figure out how something works eventuate and problematize the act of connecting one part to another. Exploded View diagrams are commonly used in technical guides as a way for the assembly line worker, technician, and prosumer to understand how something should be built and maintained. For Sayers (2018), this technical information becomes an opportunity to discuss how the way things are constructed and maintained exposes class struggles, exploitation, and other cultural phenomena. *Through collaboratively re-signifying the processes of assembly and maintenance as an intervention within the gaps between parts and ways of assembling them, how-to scripts may become negotiations of needs and interpretations* (Sayers, 2018, pp. 4–5). YouTube channel AvE, BOLTR (Bored of Lamé Tool Reviews) videos dissect the innards of hardware tools to locate what the consumer may not see within a typical usage. While trying to mend what does not need mending, AvE aims to expose the exploitation of a cheap workforce ('dark matter') in a supply chain, observing the gaps between the parts within a power tool's physical exploded view. Moreover, as an internet phenomenon, the watchers play the role of the supervisors, observing the amateur (self-proclaimed as 'Uncle Bumblefuck') fail in understanding the complete technological Blackbox (having some electronic parts inaccessible; not being able to access something because of advancements in manufacturing efficiency, etc.). The amateur continuously approaches the audience in understanding on whose expense corners were cut and who suffered from making this tool. Watchers share their experience with some of the parts mentioned in the comment section, responding, and collecting unique definitions used by the author into a dictionary of quotidian and humoristic definitions. This curated language is mostly being made as a fan tribute to the author but may also stand as a collective critical act towards the exploitation of workers in developing countries and the aesthetics of planned obsolescence.

The Kits for Cultural History is an initiative that recreates technologies from the past, using prototyping

as a form of reverse engineering to expose entanglements between technology, economy, and culture. For Sayers (2015), *sources of matter and meaning are always under dispute, and historical works are compositions that change through the perspective of time and the knowledge base of their assemblers*. Throughout the recreation of a 19th-century gadget without proper documentation, participants have realized that a craftsman who originally designed the piece has achieved a degree of miniaturization that cannot be repeated by researchers without the specific knowledge he owned. This obstacle had a degree of significance when some of the original drawings showed miniaturization of the mechanism of the *Mechanical Turk*. That mechanism was used in the construction of an early age pseudo-automatic chess player, articulating the orientalist notion in which the enlightened could program subordinated racial others for their own pragmatic needs. This machine was able to challenge chess players during the 18th century, as under the chess table sat an assistant that operated the oriental mannequin that included imitations of arm and face movements. As of today, Amazon maintains a platform that bears the name Mechanical Turk, transcending the same notion through an online platform (Sayers, 2015). Imitation of technology afforded physical and theoretical understanding of relations between old to new technological advancements and the colonial gaze.

3.2 Plastic against itself

Amateur prototyping in domesticated CNC additive manufacturing (*3D Printing*) reflects on the desire amongst prosumers to take place within industrial society. This action superficially provides the opportunity to re-territorialize the position of decision making within the capitalist hierarchy (Gabrys et al., 2013), holding both ends of the producer/consumer thread. The illusion demises as the plastic composite used in the process is a ready-made black box that cannot be synthesized in domestic conditions (2013, p. 41) and its physical characteristics such as strength mostly limited to its purpose defined by the original industrial need of forming temporary configurations. The impossibility in configuring specific chemical formulation that is unique to the final product within a non-industrial environment introduces a unique circumstance in which the plastic is destined to betray the meaning it is formed into.

Base materialism suggests that any ideal is dependent on the material on top of which it is formulated, which acts against it by contradicting its purist standpoint. Bataille (1985) demonstrates this by the human repulsion of the big toe, which enables the human body to stand up-right and form the human gaze of the world. The big toe is commonly found repulsive but cannot be disconnected from the body. The human gaze denies the material that forms it when the toe is dismissed as a foreign origin that cannot be detached. The body acts against an ideology that dictates the gaze through the desire of sex and violence. Bataille positions low classes of society as the base matter from which high classes rise. These higher classes tend to enforce certain ideologies to shape social order, which gets eroded by the former lack of basic needs. *Base materialism wishes to trace tensions in-between matter and ideology as states of difference* (Noys, 1998). As base materialism positions itself as an aesthetical difference, it cannot be placed as a political act, as it does not offer a construct of demands against the ideals. However, it may provide a prism into ambiguous tensions between matter, intentionality, and the social context.

Plastic is both seen as a material that challenges class division by imitation of luxurious materials such as leather, having the potential to challenge the ownership of objects it is shaped into. It will always appear as imitation, *tracing a possible action* rather than manifesting a concrete alternative (Barthes, 1990, pp. 110–111). Considering this notion, amateur additive fabrication in plastic may realize its potential through interpretive investigation of the tension between the industrial base-matter and the social.

3.3 Narrative as volume

Prototyping procedures may operate as an *investigation practice in-between technological matters and social phenomena*, revealing relations between characteristics of technical medium, substance, and meaning. Prototyping process of historical instruments becomes a site for interpretation (Sayers, 2015, p. 159) since any form of documentation *deliberately or unintentionally* omits specific amounts of information (Steyerl & Keenan, 2014). In the 15th-century oil painting (Hans Holbein, 1497), the artist added an entirely skewed human skull on top of the traditionally painted 2D perspective. Although today may seem like a simple photoshop effect, in the middle ages, this technique required usage of a rare newly developed anamorphic mirror. The gaze of the artist is revealed as a constructed objectivity through the technical achievement needed to produce an anamorphic painting. Using the skull to signify the fragility of life through the notion of *memento mori*, Holbein exposes the simplicity and the fragmented nature of the 2D picture and the physical body of the image as an incomplete site of representation, omitting different qualities of reality in the flat form of reproduction (Steyerl, 2017).

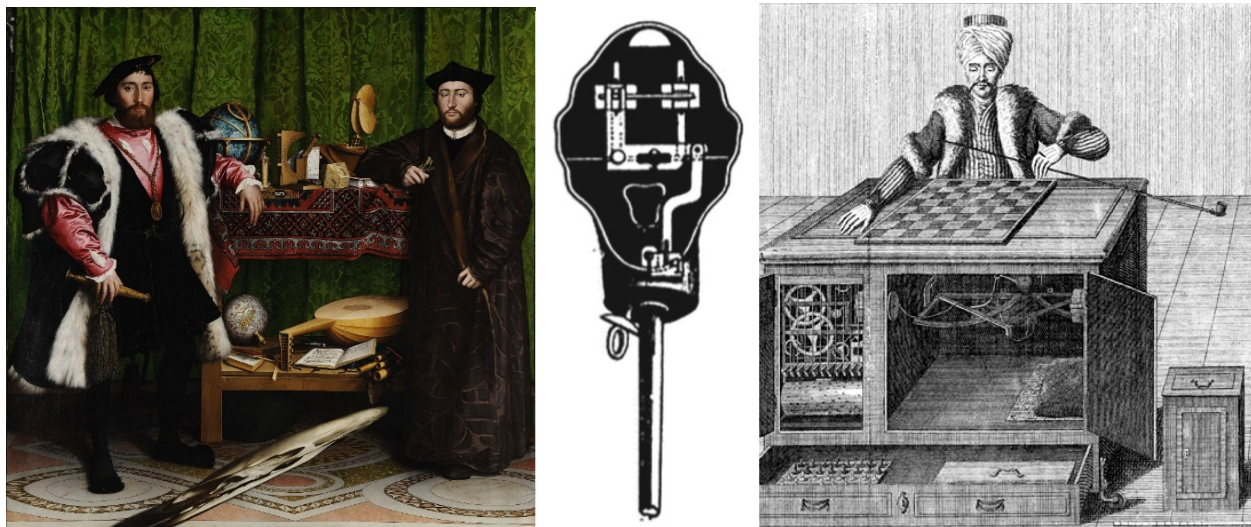


Figure 3 left: Hans Holbein, *The Ambassadors* (1533); center: “Enlarged Interior View without Electric Engine of Mechanism for the Eyes and Jaw of an Electric-Mobile Turk,” Care of Barral (1891); right: Karl Gottlieb von Windisch – *The Turk* - copper engraving from the book: Karl Gottlieb von Windisch (1783)

Gaps of information within digital documentation may reveal an opportunity to position uncertainty as counter-systematic action. Digital representation idealizes information into an imperfect abstraction of discrete and countable units, lacking the ability to register chaotic properties and ambiguous states that exists in nature (Cramer, 2015, pp. 13–18). 3D scanning suggests a radical approach of transforming missing information into the documentation itself, as surface and shape characteristics of physical objects

are translated into digital volumes. *Structure from Motion(SfM)* (Schonberger & Frahm, 2016, p. 2) is a photogrammetric method in which three-dimensional surfaces are estimated into point-cloud data from locating similar registered color patterns within a set of images. Information that is not captured within the pixels, blind-spots, shadows, and missing similarities turn empty voids into volume. This relationship transforms back into the matter as the 3D printer fossilizes point-cloud data into plastic layers. The object-into-image-into-object does not represent anything but the prototyping event itself. As the missing data accumulates into a volume, the more questionable and *uncertain* the objectification becomes – hence bringing us back to the initial purpose of a document (Steyerl, 2017; Steyerl & Keenan, 2014). Through the character of SfM, *missing information becomes an opportunity for positioning uncertainty to question the relationship between a narrator of history and a camera operator.*

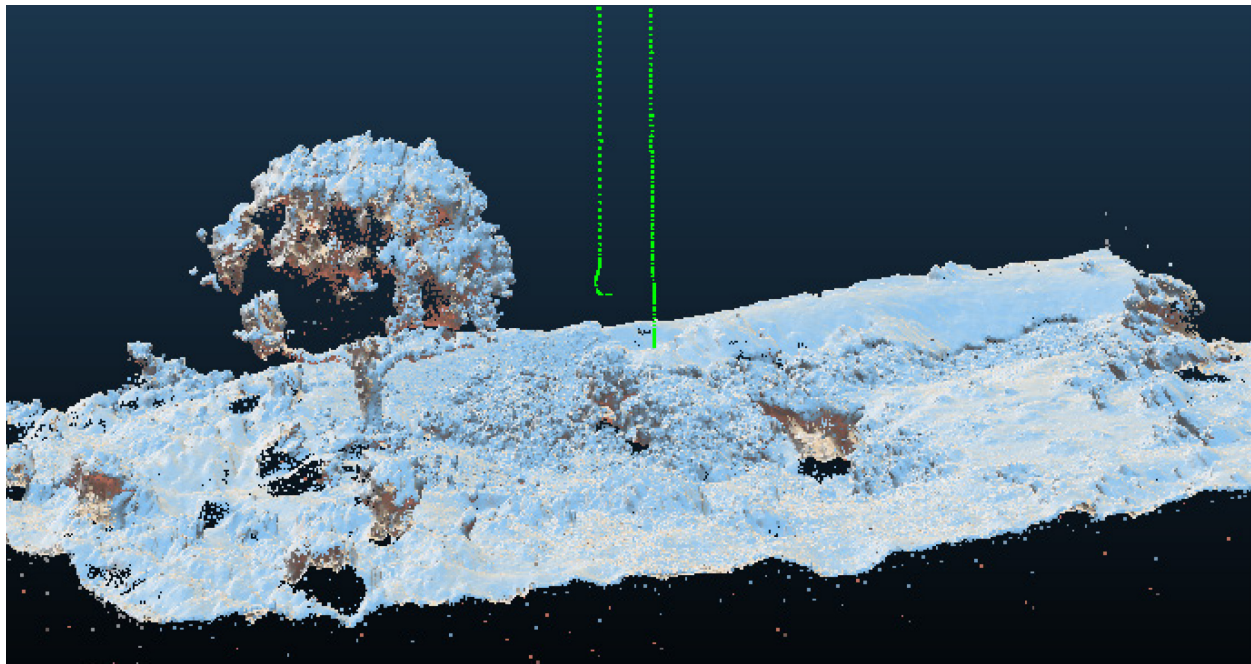


Figure 4 Locating Uncertainty with S.L. - Drone footage point-cloud (2019)

Throughout the 20th century, mechanical reproduction was accused of eroding the authenticity of an object, as duplications blur the artistic qualities of the source and distances from the social context that constructs its significance (Benjamin, 1936). Via the *migration of aura* philosopher Bruno Latour and preservationist Alan Lowe suggest that *digital copies form their biography, adding a layer of significance to the source through the unique processes that led to its inception* (Kenderdine, 2018, p. 15). In *Material Speculation*, media artist Moreshin Allahyari created and distributed 3D data sets from images of monuments destroyed by ISIS, collected through in-depth research along with Iraqi and Iranian researchers. For Allahyari (2016), the actions ISIS took to diminish ancient cultural monuments and record the process correspond to previous colonial efforts to loot and exhibit them as their own. The act of duplication stood for releasing the aesthetic value of these monuments from the colonist and institutional grip into a condition defined by those who came from the culture of the origin (Allahyari, 2016; Kenderdine, 2018). Thus, reproduction has the potential to influence how cultural artifacts are contemporarily perceived through their agency and authenticity.

Artifacts may regain their meaning through collaboration with communities in which they were made. Phenomenology dictates that experience builds on the fusion between objective information and subjective embodiment. The past is perceived through human sensual reflection rather than an abstract analytical gaze. Qualities of social and matter and individual embodiment are entangled through personal participation in their interpretation (Kenderdine, 2007, p. 62). In a *Counter-Archeology* project conducted in Dumby (Scotland), a community of rock climbers co-produced three-dimensional scans of their path within the local heritage site Dumbarton Rock. Although the site has its immense importance in the history of Scotland, the rock-climbing tradition was ignored. The aim was to portray “forms of significance, authenticity, and value acquired by the 3D digital objects themselves”(Hale et al., 2017, p. 376). In collaboration with the ACCORD (Archeology Community Coproduction of Research Data) initiative, climbers captured their paths and challenges on the rock through photogrammetry, reviewing the results on-site and re-iterating the processes. The usage of photogrammetry allowed the team to facilitate 3D scanning at a low cost, using only consumer-grade cameras to obtain the image data set. The resulting mapping divided different areas of the rock to different paths and challenges that each participant chose to problematize. Climbers have embodied the landscape and projected their own body into the surface within their recorded performances(2017). Sigmund Kracauer (Allen, 2007) sees the surface as an unmediated construct of the social subconscious, making its interpretation the source of *knowledge of the state of things* (Steyerl, 2017). By tracing their paths through the rock, participants erupted another fold on the historical surface of Dumby Rock, unfolding previous historical readings to creases apparent by omitted information. The 3D models created by the climbers were published as an official archeological record, gaining an equivalent position to the mainstream narrative of the place, and destabilizing its dominance.

This chapter attempted to locate ways in which amateur access to industrial processes may reflect on the social permutations caused by technological advances, building on the commodity as a representation of the struggles set in signifying its value. The ability to imitate industrial processes opens the potential to challenge dominant cultural narratives by dialogical prototyping processes. Imperfect reproductions can overcome divisions of labor and class, marking the outcome as in a certain distance to an ideal narrative (Steyerl, 2009). Furthermore, capturing missing information through amateur usage of accessible surveying and prototyping processes makes place for operating *in-between* (Sayers, 2018) the technology and the social, defining moments of uncertainty between collaborators and matter as a commodity that resists the hegemony.

4. Collaborative Approach

The case study of this thesis seeks to analyze what kind of tension constitutes the collaborative process between the artist and the engaged community. Aiming to raise awareness of the local narrative through western technology and methodologies might normalize the environmental and linguistic struggles. Rather than stressing on the social power structures that caused them, the traveler may unintentionally occupy the local knowledge. The attempt to assemble a harmony between different power positions of the artist and the indigenous community through collaboration creates a secondary struggle between the artist and the community. This struggle must be exposed and analyzed within the project, and while writing about it, to keep the indigenous knowledge relevant and accurately position the dialog concerning it. The difference should be kept within the hermeneutics of suspicion, in acknowledging motives of the narrators and the artist, understanding how the produced knowledge benefits the community, the initiator of the intervention and the body makes them accountable for their actions (Kiljunen & Hannula, 2002, pp. 64–68). Through this chapter, the tension between the actors is examined through relational and hermeneutic prisms to construct a spectrum of different power structures that both the artist and the community may inhabit conversates differences and ways of working together while acknowledging the various positions taken by all collaborators.

Until the mid-20th century, it seemed as if there was a clear separation between political decision making and the art-making process. The artist was mostly perceived as a private expressive subject, detached from a collective interest pursuing the sublime while working within or for an institutional framework (Kester, 1998, p. 4). Nicolas Bourriaud (2002) argues that currently, art as a personal narrative is being replaced by relational art: “a set of artistic practices which take their theoretical and practical point of departure from the whole of human relations and their social context, rather than an independent and private space”(Bourriaud, 2002, p. 131). Value is assigned to art by the encounter of the audience within time and place-specific exhibition space. For Bourriaud, Relational Aesthetics [RA] redefines politics around various approaches of social networks, enacted within institutionalized art bubbles(Charnley, 2011). According to this observation, the social perspective is inherent to all forms of contemporary artmaking.

Initially, this project aimed to find its place on a spectrum between two polarized approaches within the field of collaborative art practice. While one approach advocates using artistic practice against one's privileges(Kester, 1998), the other suggests operating within them, to deliver a more effective visual and social impact (Bishop, 2012). Surprisingly, both approaches seem to share a similarly critical view of economic power structures (Charnley, 2011). RA principles find enemies around the collaborative art practice theorists, by defining existing capitalist institutions (e.g., museums, art galleries) as the main stage for socially engaged art. Specifically, Bourriaud is accused of ignoring class exclusions that may occur through this kind of making, when commodifying social phenomena and excluding the ‘non-art’ public from the discourse (Charnley, 2011, p. 39). This may prevent a constructive process of public involvement and result in framing social context as deceit.

Grant Kester, an American collaborative art educator and critic, leans towards grass-root activity facilitation(Charnley, 2011). For Kester, socially productive aesthetic work may be a result of the tension

between the social and the political. This tension is initially rooted in the socio-economic gap between the artist and the involved 'non-art' community. Breaking the limits of fixed identities and acting within ethical awareness to privileges stands as the initial significant act that artists may apply to challenge social injustices (Kester, 1998, p. 4). Contrarily to Bourriaud(2002), this approach asks to not only raise awareness of the social context of the work but also *to act against the preconditioned socio-economic relations between the artist and involved contributors*. This position was later highly criticized regarding which extent ethics should lead the artistic practice. Over-dependence on ethical considerations, while omitting the role of *self-expression as a tool to agitate and disturb social biases*, may reduce the impact of the collaborative efforts.

Contrary to Kester (2012), art historian Claire Bishop argues in favor of a different approach - stating community-engaged artists better aspire for the act of participation as a politicized working process. Within this paradigm, artists divert focus from the production of distinct objects to involvement and production of situations (Bishop, 2012, p. 2). Through several case studies, Bishop positions the *artist as an independent participant in an event*, rather than its primary producer. An art-piece may be perceived as a commodifiable product, while it evolves into an *open-ended project* instead of a finite object. This process challenges conventional modes of artistic production and consumption under capitalism, transforming the audience into participants. According to Bishop, the belief in *artistic autonomy is political by itself. Hence it omits further ethical reflections on its contribution to social justice* (Charnley, 2011, p. 40). Both approaches intend to undermine existing socio-economic structures by dialogical practices. While attempting to place themselves as holistic perceptions, they reflect on two pillars in participatory work – usage of ethics or freedom of expression to politicize art.

When looking into the concept of *dissensus*, these polarized methods are different actualizations of the same disruption to social order. For Jacques Rancière (2010), social order is constructed by relations within a shared logic, between mechanisms of *consensus* and *dissensus*. This logic consists of the difference between *proper* and *improper* places within an absolute consensus. It separates art from culture, politics from social and culture from commerce while defining hierarchical distributions of speech and action to *proper* sites and functions. The consensus settles identities that are formed by the correlation between ways of doing (*poesis*) and the perception of sense (*aisthesis*), such as fact and its interpretation or even the rights to state it(Rancière, 2010, p. 2).

Dissensus comes as a disruption for social order, while it aims to promote equality against the definition of the *norm*. The identity, created by the consensus, is challenged by this *improper* logic that exposes specific gaps between the *poesis* and the *aisthesis*. Both art and politics have their role within this logic, as their effect is measured by *the perception (aisthesis) of equality, they infuse into the social order. Rancière sees arts and politics only as instruments to disrupt the norm*, so they cannot become the consensus (2010). Concerning Bishop and Kester, both the power of artistic expression and ethics-based activism does not transform into static identities. Still, it may serve *as a legitimate tool for challenging the consensus*. When the emancipating vision (reflected by political or an artistic action) turns into a new social order, it may be enforced blindly by self-appointed experts and lose its role as a de-hierarchical and egalitarian matter (2010).

Instead of laying under the umbrella of constant sectioned units within the social order, people may be defined against or within the political process they take part in (actively or passively). People are set in reaction to specific events in opposition to being recognized within a homogeneous community. Rancière stresses that a process of subjectification occurs when an *identity of a particular society evolves into a dispute* (2010, p. 85). Politics is, therefore, the power to reconfigure relations between one sense to another, the invisible and the visible, while redistributing space and time into new bodies (2010, p. 139).

The fluidity of human identity introduces a challenge to the pedagogical ambitions of politically engaged art, which preaches for equality and justice within a dichotomy of polarized ethics. This tendency mythicizes temporary actions into the culture while advocating representations of poverty, horror, and other injustices through the belief that repulsive content would encourage egalitarian activities. The heavy use of *mimesis* in representing issues of social domination exposes the hypocritical tendency within political art that separates itself from culture while enacting as a governor of social order (2010, p. 136). Arthur Zmijewski, the curator of the 7th Berlin Biennale, promoted art that symbolizes political actions in the shape of performances, recorded rituals, and sprayed slogans, as an opportunity to mobilize society. What Zmijewski referred to as an incubator for political action seemed to be more of an institutional hug, that puts various trending political movements into a safe stake-less government-sponsored space, rather than an actual call for action (Lange, 2012). Instead of advocating separation of sense from sense, it unites all visitors of the exhibition under one ethical paradigm. Referring to the comment of the art historian Johan Joachim Winckelmann on the roman statue The Torso of the Belvedere, a faceless body enables the anonymous spectators to place invisible parts of the society they might part in this powerful Greek body. This artwork omits a mouth to speak or face to express any specific values, thus detaches the correlation between art production and a particular social role (2010, p. 138) while framing space for political action. Although the artist's own intention has a place in the artistic process, and ethics themselves play a role to which art should respond to, the efficacy of dissensus advocates the creation of gaps between ideas. In its turn, it may develop space for egalitarian movements in society, but in no means dictate a precise way of execution.

Heading towards an understanding of what type of collaborations can be made, Kaija Kaitavuori (2018) proposes the term *Participator* to replace the passive position identified with the audience. The *participator* is marked for the ability to become actively engaged in a situation in numerous ways, rather than having a predefined role. Following Foucault's perception of the author as a changing state in the discourse, the participator's role in a process can float between being both an active observer and a moderator of a situation. Focusing on social processes rather than analyzing the creation of a finite object aims for *locating the society within the meaning of the artwork* instead of operating as its background. By this perception, *society is inquired through everyday situations between different formations* (as classes, professions, and groups), in which participants establish relationships through sets of conditions. *Figuration* sets individual thoughts and social constructs as reflections of relationships, rather than separate entities. Phenomena within a shared language cannot be defined as *things as these are always changing in relation to the processes involved in actualizing specific interactions* (Kaitavuori, 2018). Throughout the book, Kaitavuori segments participatory artworks to four different paradigms, in which the participants contribute to the productions as materials, users, target groups, or co-creators. This

approach positions both the ethic and artistic freedom advocates, Kester, and Bishop, to different process segments rather than a collusion between opposing approaches, as they prefer to see it.

Bruno Latour conceptualized a more holistic relationship between participants in an encounter, which frames artists, collaborators, and objects as equal contributors within an event. In actor-networks, *actors* (human and non-human actors) collide and affect each other through their actions, intentionality, and morality (thus *become actants*), causing a *discontinuity* in their individual course of action. This may lead to the development of a new network, instead of gathered predetermined societies. This discontinuity is conditioned by circumstances that circulate the encounter and produces a temporary that that projects on the nature of the relationship between the actors. The motivation comes not to describe and analyze traits of actors, *but to locate the processes that enabled each to express themselves through this relationship*. Eventually, this might lead to a more in-depth process of producing their own *translation* of the world they are a part of (Latour, 1999, 2013). Latour coined it against the crisis of representation, in which western-modern domains of research, such as sociology and anthropology, failed to learn from differing actants and entities due to framing them in and through predetermined notions. Societies at large are not in question since, for Latour (2013), the purpose of actor-networks is to allow researchers to learn more from these incidents and to become a part of the new *collective* rather than trying to adapt them to an existing trajectory.

The Co-creators are defined by Kaitavuori (2018) as the group of artists whose projects are the closest to Kester's approach of *dialogical art* and to the social dynamics of the actor-networks. In this type of socially engaged art, participants can *affect* the process by not only interpreting instruction or donating their body as material, instead of being able to *directly voice their opinion and put their needs and intentions* against those of the artist. Kaitavuori offers the example of The Helsinki Complain Choirs by Tellervo Kellainen and Oliver Kochta-Kalleinen, in a reflection of Kester's advocacy of communication against produced interaction. The artists asked people to perform their complaints in the form of a choir, transforming the negative character into positive energy. By letting participants establish their own workshops and democratically vote for solutions upon ethical dilemmas while providing facilities and supporting materials, the artists were able to both maintain their personal statements and promote dialog-based aesthetics (Kaitavuori, 2018, pp. 81–93). The artists did not claim to solve problems the participants brought to the act but to establish a *temporary community*. This community stands for a network in which each actor can affect both the decision making within the process and the final performances through maximizing their own agency.

A part of what makes Bishop critical about *dialogical art* sits on the fact that a focus is on a specific geographically, economically, and ethnically defined community. Kester's promotion of imposing essential themes to be dealt with, such as AIDS and low-income housing, ends in the predetermination of ethical issues and the needs of a community. This situation potentially positions process-based art as a *patronizing problem-solving mechanism*. As such, it may not offer any aesthetic quality but only serves as a political tool. Curator and art history educator Miwon Kwon (2002) suggests that societies are defined against the notion of predetermined identities, instead temporarily gathered groups seeking to act against processes of exclusion and repression. These groups may be determined by themselves or initiated through the conception of a project by the artist. The problem with the latter is that in some cases, social

bodies found or motivated by the artists seemed to go through exploitation and abuse through the materialization of the project, under the umbrella of justifying a social cause. In other cases, artists that formed societal bodies across their immediate/familiar circles had the advantage of continuous contact, common language, and trust, which allowed more unexpected developments and improvisations through the development of the project (Kwon, 2002, pp. 112–134).

Understanding what form of tension rises from artistic intention and community interest in collaboration is spotted in the character of the narrative inquiry. It differs from traditional quantitative and older qualitative practices by focusing on the words instead of numbers, counts in the relationship between the researcher and the interviewee, and interprets nuances rather than crossing topics and themes. These nuances *and the gaps of understanding between the reader and the source create space for interpretation of difference rather than a representation of the exoticized source*. The narrative suggests on how something is described in a particular area and time frame, rather than aspiring to define and verify what it is within a dichotomized truth (Kiljunen & Hannula, 2002, p. 39; Leavy, 2009, p. 25). Furthermore, this method of information inquiry avoids the practice of translating the material into academic codified language while aiming to lead the reader through gathered experiences. It does not only wish to enable access to accumulated information for a more full part of the society but also pleads to make the reader identify with the proposed reality, rather than measure and evaluate the distance from it (2009, p. 28).

Gaining the trust of readers stems from a raised awareness of the importance of *accountability* across all societies – specifically in narratives and one of the primary motivators of social bonds. This notion roots from Ethnomethodology and portrays the importance of *assigning reliability to human actions through understanding the intentions behind them and the environment in which they occur*. As people usually look for confirmation or justification for what they or others do, narratives are always positioned in relation to moral values, a particular society promotes (Czarniawska, 2004; Leavy, 2009).

Looking at the narrative as a mode of knowing, experiences are organized in a sort of a scheme in relation to the intentionality of human action. The narrative may naturally leave a gap between different segments, in contrast to scientific research. Combining the two phrases, “Plummer disregarded the advice of others and drove a tunnel in a direction which he thought would yield result.” and “this was a defining moment in the history of modern India!” (Srikumar, 2014, p. 246) pleads to the assumption that his unique action was the reason for the economic success of KGF, although when looking at the asserted attributes given to Sgt. Plummer, we may learn more about the socio-economic relations between the narrator and the described person rather than on technical advancement in mining. The description of an event in a narrative can be used *solely to attribute extended credibility and prominence of specific actions or figures, opposed to the logico-scientific need to prove or falsify the action for information verification* according to the chosen paradigm. The narrative aims to intentionally deviate from an established cultural pattern, or what science calls mainstream theories. The evolvement of the plot aspires to *negotiate* meanings rather than *verify* facts (Czarniawska, 2004).

For Rancière (2010), the aesthetic regime of art *restructures the real to accommodate the invisible within preconceived ways of seeing, negotiating new relationships between things and meanings* (2010, p. 141). This notion is evident in the politics of storytelling, in which there are no differences between

fictional and factual parts, as it mainly comes from the contrast between the *normal* and the *abnormal* (or the unexpected) within the developing plot (Czarniawska, 2004, p. 9). The power of storytelling lies on how, why and to whom the storyteller differentiates one version from another.

The process of the narrative inquiry itself is then based mostly on the researcher raising questions related to the *experience* of the interviewee. This includes the understanding of how different narratives deviate from the consensus and between themselves, continuously looking for *connections* and *contradictions* to previously gathered materials. The *how* can be found in the intonations and other performative aspects of hermeneutic knowledge inquiry (Kiljunen & Hannula, 2002, p. 49). Therefore, the dynamics should include a vibrant space to each side to articulate and expose completely their own perspective, which repetitively renegotiates meanings and affect one another within iterated interpretations from each side.

The work of art resides within the human experience of art - as a process in each encounter. It contextualizes history, culture, and language within a lived experience while weighing in creativity and vision as a contribution of both the artist and the participant (Janesick, 2008). This type of meaning-making can be seen through RA and phenomenological prisms, in which both art and viewers are being simultaneously interpreted and redefined – an interpretation that lives between the inside and the outside (of the creation). *Meaning is not external to the interaction but defined by the character of the relationality that eventually melts the borders between the seer and the seen within the encounter.* This total redefinition of a form is characterized by Gilles Deleuze (1991) as Un/folding – a vibrating movement in the materiality of the world, from one precepted fold to another. These vibrations occur when a precepted meaning reaches its limit in interaction – and *stutters* into a point of destabilization and redefinition. (Deleuze & Strauss, 1991; Springgay et al., 2008, p. 5). Through this prism difference in an encounter (i.e., between artist and community) is the leading accelerator of meaning-making.

A key performative aspect in managing an encounter builds on to which extent the researcher is willing to experiment with the form and interpretation of the written text within iterated shared experience (Denzin, 2001). Denzin (2001) stresses that a post-modern society appears as the interview society *that aims to transform the confessional mode of an interview into a public commodity. Thus, personal narratives gain value as sites of own to public meaning-making* (p. 29). Along with these patterns of privatization towards commodification that represent capitalist workflows in the academy as well, representational, staged reality sits on its own fragmented time. This situation morally begs for focus on thicker intimate interpreted narrations performances that expose the invisible other, while letting go of the one-sided control-maintained commodification representation system. Rather than aiming to represent truth, *the reflexive interview challenges and disrupts the aesthetics of it in ways that the product itself becomes the question.* Taking the cinematic documentary format as an example, in a film produced by Trinh Minh-hà (1991), originally answered questions are being re-enacted in few iterations by different non-actors from the same community, and then lip-synched back, accompanied with archive materials of historical moments. Using cinematic techniques that advocate authenticity allows the viewer to discover a broader historical perspective of that community by critically analyzing and deconstructing the visual language itself (Denzin, 2001, p. 36). In Episode III: Enjoy Poverty, Renzo Martens uses the documentary film format to criticize the moral values of his own audience. For Martens, the position of the spectator who watches or reads about poverty inhabits the same characteristics of well-intentioned aid

organizations. Both are showing themselves as the watchers of the economically and socially other to confirm a problematic situation towards solving the division. During the film, Martens proves to his audience how this method of authentication only produces more differences, through acting both as a new-liberal savior of the poor and a documentary filmmaker (Bruce, 2015). The uninvited free agent operates outside of a consensus to separate ideas and senses. In promoting the exposure of conflicts between the participants, dissensus solidifies as a form of activist art (Kaitavuori, 2018, pp. 138–141). Through his actions and repeated interviews with different actors in the field of media and aid organizations Martens maintains how these approaches are merely different branches of neo-colonial practice, questioning his own role in the production of knowledge.

Rather than advocating paradigms of acting through social divisions or against them, this chapter aimed to *trace the difference in agency between collaborators as an opportunity to challenge and understand the social from a coincidental, eventuated perspective*. Participants in an event translate and disappoint each other through gaps of misunderstanding, thus erupting a temporary community that challenges the norm that previously defined them. The first iteration of the case study resulted in a project plan that assumed a concretized set of shared interests between all participants. The failure to materialize this paradigm becomes an opportunity to examine how different *figurations* play a role in characterizing a collaborative process, and how the interferences each actor represents to another become the essence of collaboration.

5. Case Study

In this chapter, I analyze my attempts to set up conversation channels between railway commuters and residents of Bengaluru, India. Narratives, power relations, and the choice of media are examined through the original and the revised plans to create two counter-touristic collaborative platforms. This chapter is written in an essayistic style while accommodating necessary referrals to scholars and insights from the literary review, aiming to contextualize the analysis with the original nature of the meetings.

During the preliminary stages of this project, I set to imagine how my socio-economic privileges affect initial engagements with the community I became involved with. My first urge to explore relics of the old mining town Kolar Gold Fields could be imagined as a traveler's first step into the recovery of untouched lands (Bassnett, 2003, p. 4). With the emergence of a new travel route, rose pure excitement and thrill in the discovery of ancient colonial relics. The reveal of a place that showed no signs of tourism development efforts made me consciously but uncontrollably the colonist I never thought I would ever become. In the materialization of this project, I aim to create this inter-relational dialog between my interests, skills, and privileges, which I hold, in relation to and collaboration with the local community of KGF.

The leading case study of this thesis stemmed from an assignment given to me as an exchange student in Karnataka (India) during early 2018. Conducted in the Srishti Institute of Design (Bengaluru), the course *Familiar Alien* was the first step in collaboration with the Indian Railway company. Students were asked to pick a railway path, of which through field trips and community engagement characterize the change in usage and suggest a renovation plan. With no background in spatial design, my research resulted in two aesthetic outputs:

- Documentation of meetings along the route, aiming to visually depict forms of interpersonal collisions.
- A plan of constructing an event and object-based meeting points between commuters traveling daily to Bengaluru and its own residents, by problematizing the nature of their relationship.

Through misunderstandings with my collaborators, I set to trace the gaze held by a foreign student/post-tourist traveling the railway to the unknown, and assess what kind of knowledge the dispute (Rancière, 2010, p. 139) of our colluded identities would entail, and how would this situation allow invisible positions to emerge.

The first experiment with this method was conducted in Whitefield, Bangalore. Underground bars are quite common in India since Hinduism forbids the consumption of alcohol. One can always find the signs but also bear the guilt once entering these arbitrary hole-in-a-wall temporary refuge for the sinners. While seated for a beer by one of the sticky tables, I was invited by another customer to share a drink together. After a short introduction, it seemed as though the person cannot communicate in English, leading to his decision to ask for my pen and notebook, in which he began to draw what cannot be said in words. Thus, the accidental presence of a pen transformed it into an actant that aestheticized this *figuration* (Kaitavuori, 2018; Latour, 2013). Occasionally another customer functioned as an interpreter, translating my drinking partner in shouts from the other end of the room. During the event performed as the anchor of our *temporary community*. I drew what I knew about the exploitation of Dalits in the gold mines, while

he simply wished to introduce himself, portraying his workplace, family members, and the state of their relationship. This conversation resulted in a short comic series, in which limitations of verbal communication aesthetically exposed colluding interests in a dialog between participants coming from diverse cultural backgrounds and economic classes.



Figure 5 left: *Wife is stealing my money*, Yash, 2018; right: *Portrait with a forest*, Vivek Studio, 2018.

Inspired by the *professional post-tourist* (Stylianou-Lambert & Stylianou, 2016) Martin Parr, in the following event, I commissioned a local photographer to produce a portrait of me with what he defines as a natural backdrop. Being a student of post-modern theories, I saw it as an opportunity to *reverse the gaze* (Bhabha, 2012, p. 107), imagining how colonial expressions of control would be handled through contemporary Indian eyes. Both the double-figure and the presence of a generic forest, taken straight out of the Windows operating system default desktop backgrounds collections seem as hybridized view by a member of the global economy, rather than a materialization of a manifested power play. Autoportrait (Parr & Heiferman, 2000) comprises 57 portraits of Parr himself, taken by local photography studios in different places around the world. Parr willingly positions himself as an object planted in different artificial and exotic sceneries, which uses kitsch to establish the touristic experience. Parr plays the everyday man that looks back to the viewer, but he is also signed as the author of the photographs and the book itself, positioning his own critical post-tourist identity as the subject. Parr claims ownership of the experience (Wee, 2011) that is set in a predefined environment. I suggest here that during the course of actions, I have initiated the character of the communication maintained with the studio photographer, using ambiguous requests, having most of the process done through digital retouch techniques I could not foresee, potentially enabling mutual ownership of the experience. These early experiments have

predicted how my politicized approach was destined to fail while revealing more about gaps in communication than becoming a vessel for political action. The intentions of my collaborators caused a *discontinuity in the course of action* (Latour, 2013), producing a translation of the tension between the social positions each of us takes place in.

For the post-tourist signs are not confirmed or excavated in different ways, instead mobilized by disrupting, acknowledging them within local collaboration networks, while forming dissensus through gaps of information (Rancière, 2010; Urry, 2002). Both the collaborators and the post-tourist aim to intensify their own agency, which in turn shapes the boundaries of a temporary site. Mobility acts as an agitator between intersecting narratives, producing a difference between them rather than conforming to an expected set of behaviors. The insistence of materializing bits of academic theory with collaborators that have no interest in it produced an account of the misunderstanding itself, that cannot be conformed to the norm I have acted initially through. This tension plays a crucial role in the following materializations of the project.

5.1. The KGF Tourism Development Initiative

The project began with an ambition to promote grassroots development of local heritage within indigenous society, using contemporary prototyping and surveying technologies. Based on two various parts, it was formed by a collaboration with a historian, artists, and students from the mining town Kolar Gold Fields, India. The re-wired triangular connection between violence, cultural heritage and economy (Appadurai, 1988), was planned to be established through the creation of mining waste-based souvenir production, and an interactive site-specific theatrical performance that would echo the struggles (Kiljunen & Hannula, 2002, p. 65) this community is going through, disguised as a gold hunting experience. In the following sub-chapter, this original proposition is described and analyzed to understand what inspired it, and why it went wrong.

Through exploring the Bengaluru Majestic-Bangarapet railway line, I became aware of the historical developments around the Bangarapet Junction Railway station. Following the initial discovery of small-scale gold panning tradition, successful mining surveys from the colonial period led to the inception of an industrial mining hub around an area that was later known as Kolar Gold Fields (KGF) (Srikumar, 2014). Dalitⁱⁱ workers were transferred from farming communities across Tamil Nadu and exploited in horrible working conditions, although, for the first time, earned a stable monthly salary (Nair, 1998). While their social conditions had improved since the Indian independence, when the mines became defunct (2001), government authorities left them without any rehabilitation plan. The unemployed workers were provided with only a scarce daily railway route to Bengaluru. The railway that was initially built by the colonial extractive industries to mobilize luxurious materials out of the subcontinent by exploiting lower castes is now privileged by software companies from Bengaluru, who use the same workers as low-paid service vendors (Srinivasan, 2018). Furthermore, harmful exposure to fine-grained poisonous dust from the mill tailings (Roy et al., 2007) led to massive water pollution and severe lung conditions amongst local inhabitants.

On the contrary, surrounded by a plethora of imported European trees and other types of vegetation, and full of diverse relics from the colonial mining era (Srikumar, 2014), KGF is described and praised by locals as *Mini England* (White, 2010). The positive memory of colonist authorities is entailed by locally

written historical accounts, novels, poems, songs, and short stories that portray the moral duality around gold extraction, Positioning the private British mining company as an essential part of the local identity. In *Man-Made Mountains*, the poet S.A. Hazen (personal communication, March 11, 2018) both mournsⁱⁱⁱ the courageous workers while treasuring the colonial landscape. The materials reflect both on the pride in the labor of extracting the desired metal under a British initiative, through the danger and the exploitation under poor working and living conditions.

These easily obtained rich, contradictory, and locally produced writings in English about a place that does not exist on the Indian tourism map, made me curious about the anonymous KGF both as a scholar and a traveler. I intended to exaggerate the conflict between these positions by performing both the thirst to occupy local knowledge and the ethically driven ‘savior’ of the local community narrative, inspecting the dangers imposed by both the insider and outsider positions. Borrowing tactics from reflexive interviews to put the event itself in question, I aimed to stage academic post-colonial and post-structuralist theory against my urge to consume colonial heritage as a method to challenge my gaze while collaborating with the narrators.

In cooperation with local contributors, the leading principle of the mentioned actions held the potential of symbolically reversing the flow of capital along the railway line. Key events and monuments were selected from historical writings, collected, and validated by the historians and local social activists Focused on mining activity related materials. The accumulated data was about to be translated into two different mediums, using surveying technologies. Earlier used by colonists to translate unrecognized cultural artifacts to capital value(Cohn, 1996), their contemporary counterparts – GPS devices and three-dimensional scanning processes, were planned to be used for mapping narratives into site-specific performance, commodifying monuments and cultural artifacts into mining waste-based souvenirs.

Acts were planned *externally* for domestic tourists from Bengaluru, and *internally* engaging an open dialog within students living in KGF, on developing their relations towards this heritage through contemporary technologies. Invited participants from Bengaluru were to be parallelly manipulated and educated through buying culturally camouflaged mining waste. As mentioned in the second chapter, field survey methodologies were developed by colonial regimes across their territories to measure the capital value of captured assets, leading to a scientifically validated archive that will be efficiently managed and statistically accurate to the limits of the quantified colonial knowledge (Cohn, 1996). European travel routes were established in correlation to the progress made by those early surveys, ready to be consumed by the private individual(Mohanty, 2003). Instead of finding precious metals, participants in the gold hunting experience were to be exposed to the history of exploitation and desertion of mining town inhabitants through a guided walk on one of the mining dumps.

The historical research of the project began with a reading of the thorough historical study conducted by Dr. S. Srikumar (2014), whose writing style marked a fascinating tension between modern scientific methodology and personal devotion to promoting his political agenda. Srikumar is a retired bank manager from KGF, who made his Ph.D. work to collect the vast cultural and social legacy of the local community. Although not including any reference section in his book, Srikumar suggests that after assessing every piece of available information, his research accounts for “a filtered truth. 100% purified truth... contains purified truth, not ordinary truth - removed all impurities.”(Cohen, 2019b), and later implies that he has “taken the holy work, there is no sigh, there no hesitation.”(2019b). This conflicted observation of a scientific scholar who grades his sources in levels of purity is further entangled by the style and chosen

language of writing. As mentioned in the third chapter, Srikumar tends to write in an emotionally charged style that exposes personal attachment to the materials. This and the usage of the English language came from the need to raise a world-wide awareness of current discrimination of Tamil-speaking minority in Karnataka (2019b). Seen through the writing style and the choice of language, Srikumar (2014) operates through a hybrid position that fuses two cultures of knowledge and sets of values (Kiljunen & Hannula, 2002, p. 66). The complicated relationship between personal passion for resisting state oppression, following western enlightenment values, and shaping it as a spiritual journey, may suggest a precise hybridized characterization of the above mentioned and other historical accounts from the defunct mining town.

Following a series of phone calls, Srikumar arranged a meeting to discuss the project proposal with Tamil-speaking minority scholars, artists, and activists in a recently closed Tamil-speaking high school. Through a three-hour-long session, it seemed as if I was more interested in showing my accumulated knowledge and selling my perspective than engaging a fruitful dialog. The participants have focused on stressing the need for the direct materialization of political protests rather than co-promoting the development of the educational and tourism-oriented approach. Both of us offered already concretized solutions, rather than conversing on a possible collaborative paradigm. Furthermore, these scholars declined my first request to invite college students, concerned by the inability amongst the latter to comprehend the knowledge they possess and the necessity of the project. My passion for making my participants reflect on their industrial heritage colluded with their advocations of Tamil pre-colonial culture.



Figure 6 Meeting in Andersonpet (13/03/2018)

Drama group leader J.P. saw the proposed theatrical function as an opportunity to promote the Tamil language as an essential part of youth identity in KGF. J.P. is a social activist, actor, dramatist, and a physics

teacher, raised in a family of miners. Both practical and passionately filling his roles as a cultural leader, J.P. started planning enactments that portray various aspects around the daily routine of a miner, based on local historical writings and living testimonies. Meanwhile, I have conceptualized two approaches to materialize the project through the work with James Paul, S. Srikumar, and future collaborators.

5.1.1 The KGF Gold Hunting Experience

This action came to question how site-specific, locative-technology driven theatrical performance may raise awareness of socio-economic and environmental issues of KGF inhabitants. The performance was based on transforming a metal detector to a GPS device – positioning the source of knowledge above participating tourists. In the core of a simple treasure-hunting metal detector, two sound-generating oscillators compare reference wave to a similar parallel one, which in turn changes when it gets close enough to a metallic object. A reversed metal detector maintains preregistered locations of the hidden treasures by leading its user through scattered coordinates along with a specific environment. Following the paradigm characterized by Sayers (2018), prototyping a bare-bones GPS device affords an opportunity to rewire the relationship between contemporary mapping technologies and primitive metal detection methods. Echoing tension and assimilation between colonial and local class-divided narratives, GPS guided metal detector was planned to be used within a *derivative* walk around the Kennedy Line mill tailings. Paths that trace connections between worker colonies, mining shafts, and British private recreation compounds of KGF were planned to be virtually projected on the site through pre-programmed coordinates. The absurdity of the performance, knowingly looking for a specific material in a place it cannot be feasibly reached, functioned as the base for exposing an alternative *fold* in on the surface.

During the first colonial surveys made in Kolar district, an army veteran and amateur surveyor John Warren described a sight of locals in the village of Marikuppam following a peacock to a spot on which it continuously flies and descends. This would suggest the potential existence of gold enriched soil (Srikumar, 2014). On the contrary, contemporary research on peacock behavior patterns suggests that deceitful signals are assessed as more than 30 percent of mating calls amongst male and female peacocks. Moreover, the deceptive quality of the call is defined only by the reappearance of a specific “hoot” call and equal in its sensory characteristics to a real mating call (excluding clucks made by female peacocks during successful mating). As GPS signal consists of confirming numerous satellite signals, true and false signals collide, forming an unreliable system. A range between deceptive and true calls will be mapped and used as the GPS navigating signal, keeping the leaden audience dislocated. Once the user would eventually get to a spot, one part of the performance by participants from a local drama group will begin. The screenplay was planned to be written by James Paul and would have portrayed comic and trading anecdotes of gold daily routine amongst gold miners, such as safety regulation singing contests and family relations. This aimed to reflect on both the rich cultural history and class struggles amongst the inhabitants of KGF. The play was planned to be enacted in Tamil – the mother tongue of the town’s majority, which is no longer taught in high schools due to the political atmosphere in the state (hence nowadays, the younger generation does not know how to read and write their mother tongue). Translation of the show will be provided by the accompanying local treasure hunting guide. A personal dialog rather than a politically generalized transcript, breaking the commodified/colonializing aspect of translation.

Although this plan was thoroughly coordinated, due to the lack of funds and limited timeframe, we could not materialize it. Furthermore, through the many meetings with the production collaborators, the narratives provided by diverse sources as local historical accounts were discarded as personal observations, and do not correspond with their own perspective. The fact that each collaborator held a conflicting narrative about the mining history of KGF made the process extremely slow and unpredictable. From this point onwards, I would describe the second part of the project that did materialize to a certain extent.

5.1.2. How may commodified cultural artifacts raise awareness of an oppressed community through commodification?

In the past days of colonial India, the shortest wide gauge railways were laid between KGF and Bangarapet to efficiently mobilize extracted gold from the mills to the port of Chennai. As nowadays the railway keeps complete dependence amongst the local workforce of connection to the state capital Bengaluru, one might assume that KGF has nothing else to offer. Francis Alys' *"Faith Moving Mountains"* portrays collaborative action in which 500 people gathered with shovels at colossal sand dunes in the outskirts of Lima, Peru. In a sculptural exercise, they have moved a dune by few inches, illustrating the effect of collective power in relation to the socio-political turmoil it responded to (Kwon, 2002). Towards the end of his book about the history of KGF, Dr. S. Srikumar (2014) suggests using mining waste in the production of porcelain ceramics. This suggestion is supported by scientific feasibility research conducted by the KGF Institution of Rock Mechanics (Roy et al., 2007), which proved the material integrity of using the waste mixture in the manufacturing of concrete and clay building blocks. Production of souvenirs out of figures and materialized scenes from the collected cultural archive of KGF aimed to represent the rhizomatic history of the area, while mobilizing the waste out of the town on the same railway lines that brought the machines that produced it. In collaboration with local artisans, the small sculptures were planned to be manufactured locally and sold along the railway line to Bengaluru as a merchandise of the mining heritage and post-mining conditions. Thus, it aimed to echo the socio-economic and environmental struggles of KGF inhabitants at the transitional space that maintains them.

The process was shaped in towards minimizing my agency, by signifying and producing the souvenirs in the connection between KGF based narrators and production facilities in and outside of KGF. The idea was that by establishing of a network of collaborations between narrators and craftsmen from each side of the railway may position KGF as the center of decision making in value production and Bengaluru as the original site of material extraction. Subsequently, the plan was to gradually move the prototyping and casting knowhow to KGF, establishing local control of both knowledge and commodity production. The process constituted of the following steps:

1. Locate objects and landscapes mentioned in the historical accounts and following an authentication process of their cultural significance with scholars such as Srikumar.
2. Capture the defined materials with a digital camera using and translate to volume using the open-source photogrammetry software Meshroom (Alicevision, 2019).
3. Send the resulted three-dimensional mesh to a Bengaluru based additive fabrication service

4. Locate a local supplier of molding silicone, and produce the mold within facilities of a public art college in Bengaluru (Karnataka Chitrakala Parishath)
5. Source mining waste material from dumps across KGF and begin the casting process with additional bonding materials

Throughout the case study, each collaboration would be analyzed within the type of engagement, tourist gaze applied in reading the narrative, and the technological portrayal of the tension between the actors within a transitional space.

5.1.3. Representing History of the Tamil miners with S. Srikumar

The first step constituted of my own consumerist interpretation of the historical accounts, using writings by the community as a source for translation. Sites and objects featured in the local historical accounts were assembled as a personal travel route for site-seeing expeditions to KGF, authenticating my touristic reading experience with a physical visit. In reading the report of Srikumar (2014), attention was given to relic description that intensified, conformed, and entangled archeological findings, emotionally and scientifically, in a fight for recognition amongst the ex-mining community. For instance, idols of the goddess Durga were commonly used by miners throughout history to protect them while against dangers during their work. In salvaging and praying to ancient deities found in the construction of KGF, according to Srikumar (2014, p. 134), Tamil miners have claimed their place in the rich history of mining around the

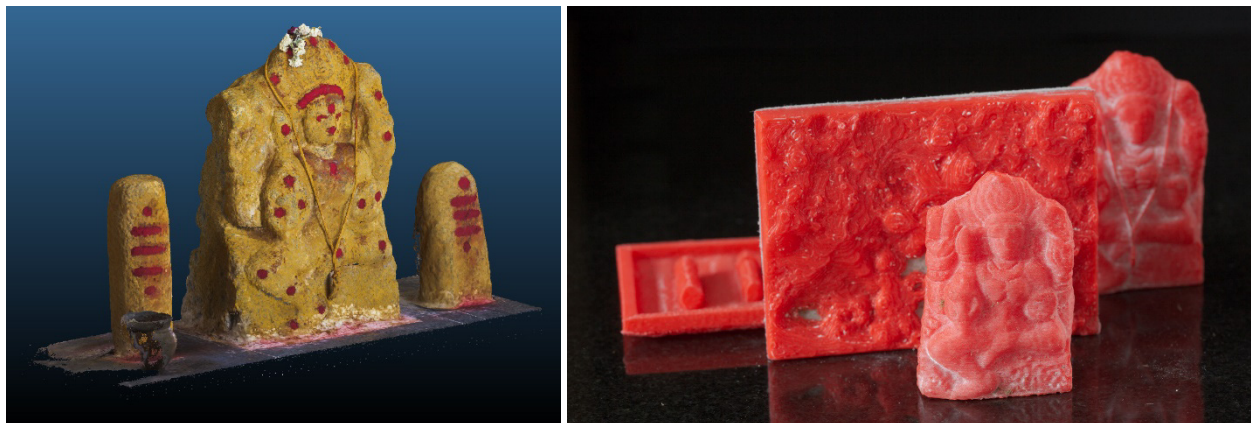


Figure 7 left: Durga of the Mines - Centuries old deity that was carried by many generations of miners from different cultures across KGF's history (Srikumar, 2014, pp. 131–134); right: 3D printed models – used as reference objects for molds

Kolar region. Following this signification, I have marked the site, received accurate directions to the spot Srikumar and documented the deity, thus aestheticizing intersection the agencies of the dweller and the exotifying explorer. Using my privileges such as available time and imaging skills to materialize written narratives, I set to act against the socio-economic biases (Kester, 1998) that afforded the inception of this project.

The monument of the working miner was chosen the first relic for commodification, due to its clear representational form colonial and post-colonial oppression. It stands in a small abandoned garden nearing Five Lights Circle – KGF's official entrance and opposing the bungalow of colonial times leading mining company manager John Taylor, defined in local accounts as the godfather of the town. British

mining companies introduced a yearly celebrated event named *Safety Week* as a response to protests led by worker unions. High death tolls in the mines due to inadequate safety procedures were unwelcome news for the revenue. Additionally, the poor underpaid miners kept stealing styrene candles and calcium carbide stones, initially used for underground hand-held and headlights, for home cooking and resale purposes. Along with tighter inspection procedures such as finger-print stamping, the introduction of mining safety songs, painting, and film contests promoted work commitment through culture to transfer safety responsibility to the miners (Nair, 1998). The miner holds a standard drill and wears a plethora of safety equipment – echoing the early culture developed around safety procedures. Paradoxically, former worker union veterans decorate the sculpture during the 1st of March yearly, dressing the already protected miner figure with flower garland emitting secondary spiritual protection. This also stands in contrast to the fact that the company that built the statue (BGML) left the workers with no decent compensation or alternative income sources. Raw footage (authorized for public usage and found in the online archive Pad.ma, was shot by R V Ramani for the KGF-born historian Janaki Nair) had the aesthetics of a scanning/surveying procedure, reflecting the ambition of the filmmaker to catch the last glimpse of light in KGF a moment before the mines officially close. This scanning effect, zooming in and out, panning left and right, tilting up and down in a rather mechanical manner, inspired me to locate some of the recorded objects, in correlation to information obtained from the book *Kolar Gold Fields: Unfolding the Untold* (Srikumar, 2014). 3D scanning technology was used in conjunction with locally sourced material to utilize colonial mapping practices towards the concretization of a historical narrative of the oppressed



Figure 8 The miner statue – reference photos for photogrammetry process

Dalit community. Once the monument was authenticated with local historical accounts, I began to plan the initial production process.

After calculating and cleaning a 3D point-cloud model, a mesh-based model was 3D printed in collaboration with Voila-3D (Bengaluru based 3D printing service). The model was then polished, coated, and made into a silicone mold in the sculpture studio of Karnataka Chitrakala Parishath using materials available in any hardware store, except the silicone itself, which was also sourced from a local supplier in Bengaluru.

The initial casting process involved a maximum stable mixture of mining waste into the sculptures, unified by polyester resin to achieve for a low production cost of around 15 rupees (20 cents) per copy. The mining waste is a challenging material use, due to the consistency of 75% very fine-grained silica sand in addition to chemically active metallic substances, maintaining almost zero plasticity and rejects many bonding materials (Roy et al., 2007). Resins could solidify with a decent structural quality while mixing into it up to 60% gold mining waste. The production process of polyester resin was also preferred due to its fast curing process, insensitivity to ratio inconsistencies with its curing and accelerator agents, and due to the modest lab processing equipment requirements. However, the initial casting procedure proved to produce enormous amounts of plastic waste. Moreover, the polyester material itself has a terrible environmental footprint and requires respiratory protection as it emits poisonous gasses while curing.



Figure 9 60% mining waste / 15% Plaster of Paris / 25% polyester resin / black pigment / brushed patina

Parallel casting experiments in clay were conducted in the Bengaluru-based electric ceramics workshop Rainbow Ceramics, in tandem to a collaboration with the traditional brick making factory Kishor Bricks located near KGF. Clay samples were collected from different spots around KGF, evaluated, mixed, and burned in different temperatures, aiming to replicate the results of Roy et al. (2007). Initial mixtures with locally sourced and filtered earth proved to be fragile. Hence, I chose to work primarily with workshops that provided red clay and porcelain as bonding materials.

The attempt to create collaboration between many different bodies with conflicting interests was driven by my motivation to manifest my agency only through an ethical framework (Kester, 1998), by understanding how to use my own somewhat limited privileged access to resources and available time as the platform of operation. This strategy proved to be quite challenging, as many collaborators could not perceive how this move will expose them to new economic possibilities or rescue them out of poverty. Prejudging the need for recognition amongst KGF societies, along with the portrayal of the dichotomized evil of tourists and industrialists, made this plan too rigid and patronized for encompassing a true collaboration. Engaged college students and narrators were asked to contribute their own perspective in relation to interpreted narratives without having the opportunity to be active moderators of the situation itself. This process provided a limited space of exposing the involved agency of me as a tourist/researcher / self-acclaimed social worker while avoiding the socio-economic class divisions and colluding interests amongst KGF inhabitants. Principles of local colleges were extremely positive of hosting 3D printer in their premises for their own needs but refused my offer to conduct after school activities for the students. In addition to the challenges I had with materializing the plan for an interactive theatrical production, this situation resulted in formulating a more modest approach, focusing on intimate dialogs with KGF based narrators and artisans.



Figure 10 S. Selvaraj, *McTargets Incline Section –Safety Week poster, 1966*

5.2. One-on-One Encounters

The revised methodology repositioned the notion of souvenir as a tourist-object – a memory of short dialogs between narrators, artisans, and the traveler (myself) within actor-networks that were initiated both by the community and me. The dialogs were based on the information and artisan know-how exchange, framing the theme of the project as an intimate site for a shared experience between the dweller and the traveler (Janesick, 2008; Lury, 2002). Instead of realizing a commodity that its value is measured in money, the barter transactions avoid social, political, and cultural correlations to specific norms (Appadurai, 2012, p. 81), as each side evaluates contribution in relation to their own standards. Barter is simultaneously leaping above and exposes complications within the material and knowhow transaction between the dweller and the traveler. This approach aimed for maximizing agencies and interests of both sides as the base of the shared experience, separating and interweaving senses, directly contextualizing the discontinuities and translations (Rancière, 2010) comprised of linguistic and mechanical discussion. The following paragraphs describe selected dialogs, in which materials and subjects formed different actor-networks and temporary figurations.

5.2.1. Reading the archive with C.S.

The Elusun electronic bookstore is comprised of a modest arrangement of bookshelves and a small passage that leads to an improvised space of electronics workspace, a photography studio, and a small darkroom. C.S, a retired banker, maintains this place open daily as a living memorial of his Father K.S. Seetharaman (K.S.S). The latter was a self-taught photographer, musician, and social activist, who collected throughout his life a rich record of the KGF history in both captured in images and texts. Unsorted negatives of his work crammed inside large plastic bags, containing hundreds of thousands of

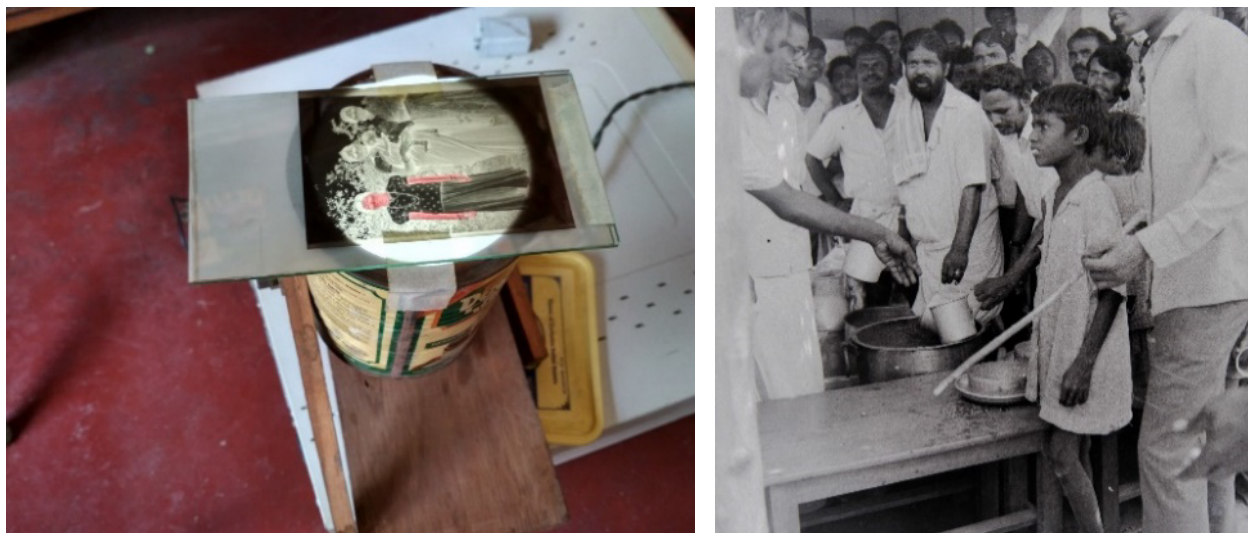


Figure 11 left: Improvised copying table; right: K.S.S, *Protesting miners given a meal by a local businessman (circa. 1970)*

commercially taken retouched headshot portraits, commissioned works for the mining authorities, personal documentation, and other approved negative development of customers. This mass of discarded collective memory lay entangled, beneath these shelves since K.S.S has passed. Using improvised light

table C.S. and I started analyzing and digitizing the different photos. Through the sorting process, I selected pictures that seemed *strange* and asked my collaborator to clarify their meaning. This method allowed us to recognize key events from the history of KGF, otherwise destined to be forgotten. This weekly meeting brought fulfillment for my urge to explore the unknown, and the efforts of my collaborator to learn more and preserve the historical account of his father. Together with input with passersby who shared tea with us, our colluded agencies have expanded the locally defined archive by negotiating meaning by the exploitation of the amateur anthropologist's ignorance (Sontag, 2001) to leverage indigenous knowledge.

5.2.2. Tracing Uncertainty with S.L.

The collaboration with S.L. was based on the failure of authenticating a narrative within a survey as an opportunity to destabilize preconditioned colonial hipsterfication of the old mining town. I have acted as an agentive tourist (Smith, 2013), thrilled to capture the origin while framing uncertainties within the actor-network as a reflection of the whole event.

S.L. is a multi-disciplinary artist, previously employed as the Chief Field Artist for the nationalized mining company BGML, for whom he produced technical drawings and maintenance guides for four decades. Nowadays, his main concern is to find diverse ways of recording the history of KGF for future generations. Each time I asked S.L. about his own emotional involvement, I received a detailed account of a particular event in the history of KGF. Over the years, S.L. directed social, theatrical dramas and musical orchestras that portrayed the economic struggles and safety hazards brought on the mining community. Since the decline in gold production around the early 1980s, S.L. began to document the deteriorating townships around the mines. Eventually, he drafted his own mining heritage tourism initiative, turning an abandoned shaft into a bar that also functions as a museum.

During the time I met S.L., he was busy locating the origin of KGF, or in simple words – the shaft that brought commercial success to the John Taylor mining company with the discovery of the *champion lode*, the main gold reservoir in the region. In contrast to earlier drillings that went straight down, Plummer shaft was made in a crosscut, stumbling upon relics of ancient gold mining works. Considering the intentions of both Srikumar and S.L. to trace the Tamil cultural footprint on Kannadiga land, the story of the origin is symbolically important. Tamil gold miners both met their ancient colleagues and set the future for KGF by their own hands. Together with a priest turned wedding photographer, S.L. went to look for the origin, relying on testimonies of old surveyors. After locating the suspected area, drone footage was taken, scanning it in circular and zig-zag movements needed for the photogrammetry process. As we were about to leave, a shepherd came by and revealed that the real origin is right behind us, although he could not authenticate it. For a few moments, S.L. seemed disoriented and distressed, while in a later conversation, assured that he gained more credible sources for a second expedition.



Figure 12 G. Jayanthi, Locating the origin of the gold (Marikupam, March 2019)

Although not accomplishing the initial goal set by S.L., I found this attempt in reclaiming history through contemporary surveying technology as an accurate signifier of the intellectual and emotional dedication L. holds in his mission to tell *the real history of KGF* (Cohen, 2019a). The resulted 3D model may have essentialized the agency of my collaborators through the chosen site, the course of events, and finally, the means of depiction. My own artistic and academic agency aimed to mark the tensions within the actor-network (Latour, 1999), through our conversations and entanglements. This moment of *uncertainty* promotes the intentions of L. in defining his own attachment to the site, rather than supporting the glorification of British surveyors.

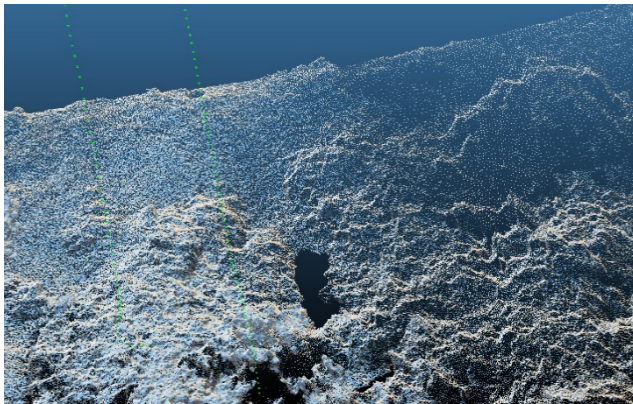


Figure 13 left: Point Cloud data from drone footage; right: 3D printed mold reference

5.2.3. Brass casting with A.G.

Towards maximizing agencies of dwelling communities in the souvenir production, I needed to locate a skilled casting artist that is interested and able to permanently accommodate a 3D printer in the workflow. I have approached the brass casting artist A.G., as he was the only craftsman who works with casting processes in the periphery of KGF that was interested in a collaboration^{iv}. A.G. is an architect and a sculptor, maintaining a small workshop for Hindu idols. He works mostly with manual tools throughout the process, as a descent of 4000 years long metal casting tradition across the Indian subcontinent. Throughout our collaboration, I have tutored his son G.D on the photogrammetry process, CAD modeling, and the 3D printing process while obtaining metal casting and finishing skills.

The workshop uses a simple form of sand molding technic for small to medium casting procedures, which opposed advantages and limitations that defined the final appearance of the casted souvenirs. Sand casting is a quick and affordable way of accurately reproducing a specific surface area. However, any multiple creases that result in undercuts are broken once the pressed original copy is taken off the mold. Furthermore, the worker struggled in achieving perfectly detailed upper mold faces, as trapped air bubbles were challenged by textured surfaces. These limitations led us to convert the resulted 3D meshes into reliefs, accommodating a simple workflow using the open-source modeling software Blender (Community, 2019). The revised workflow resulted in easily reproducible and highly detailed models, along with recorded video tutorials, to transfer the control of this knowledge to the local workshop. This aesthetic negotiation between metal casting expertise and digital output represents the essence of our relationship.



Figure 14 left: Relief casted model; right: 3D casted model - a cavity in the back due to the trapped air bubble

The adaptation of obtained point-cloud reference from the journey to Plummer's Shaft to the 3D printing and sand molding processes enforced limitations that further thickened the dominance of *uncertainty*. Trees had to be cut, bushes, and people smoothed out and flat cut bottom surface was applied to enrich the detail of whatever has remained. The relief conversation process in-depth calculation perceived from one parallel axis of light rays to a single viewpoint. Furthermore, power shortages in KGF forced us to produce low-resolution 3D prints to reduce the total fabrication time. Thus, the subpar quality of the image echoes the relationship between different classes that collaborated in its reproduction,

Aside from producing the souvenirs, A.G. asked us to exemplify how this new device would contribute to the business. The workshop is most famous for its expertise in producing three-dimensional Sri-chakra castings. The Sri-chakra symbol is an overly complicated composition of nine interlocking triangles, representing the non-duality principle that unifies subject and matter into one cosmic truth. We decided to confront the issue using the same knowledge practiced by A.G, although contemporary researchers have recreated the error-free formation of the Sri-Chakra using mathematical equations. Before dying,

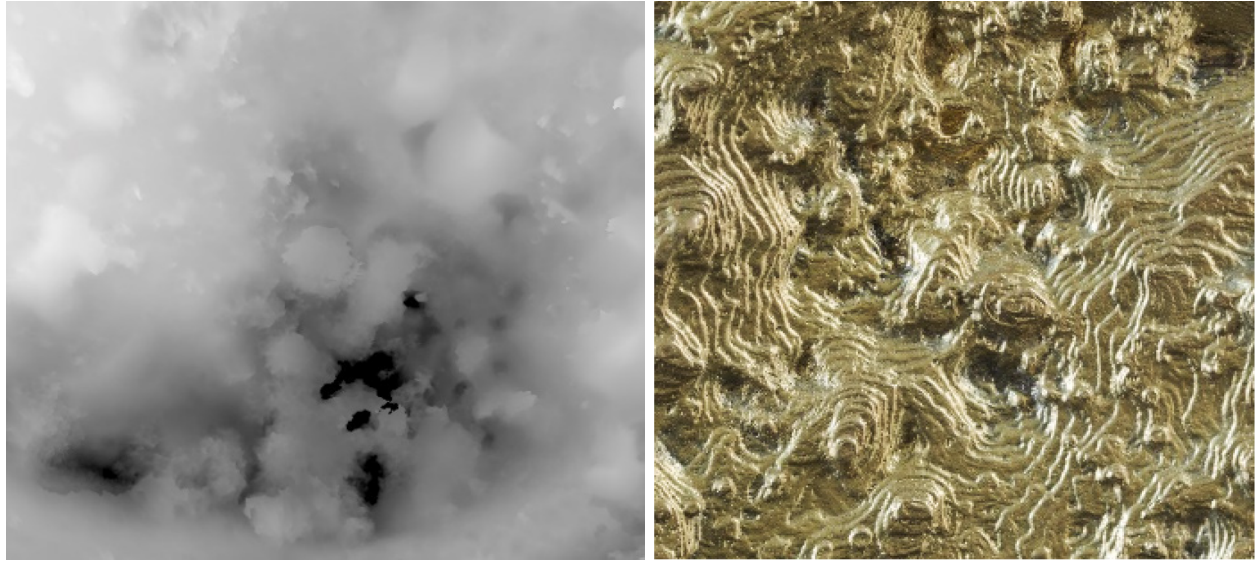


Figure 16 left: Z-Depth map; right: Casted relief detail

the spiritual guide of A.G posted a YouTube tutorial for drawing an optimal Sri chakra. Our challenge was to model a digital copy using the Fusion 360 (Autodesk, 2019) CAD design software. This tool was chosen due to its free license option and a smooth learning curve. The notes by A.G. and Sri Amritananda Natha Saraswati (Saraswati, 2011) focused on the need to confirm the triangles to five accurately spaced parallel lines. After repeating the steps several times, we achieved a composition that suffers from four critical errors. Nonetheless, a close comparison between the printed object and the manually sculpted original revealed that although not flawless, our collaboration resulted in a significantly more accurate shape than the one perfected by A.G. for the last 20 years. The parametric nature of the design has also afforded scalability and adaptability of the form to different bases and uses, leading to immediate adoption within the production workflow.

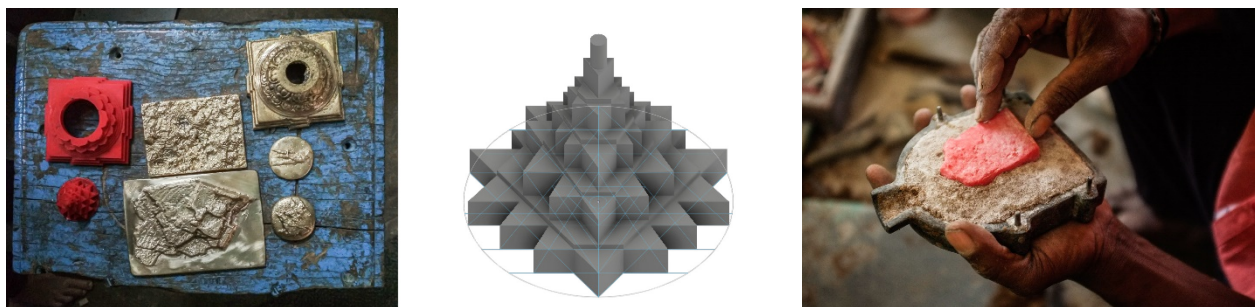


Figure 15 left: 3D printed originals and casted copies in A.G workshop; center: Sree-Chakra 3D model; right: Sand mold making process (A.G workshop)

5.2.4. Clay casting with Kishor Bricks

The efforts of translating the 3D scanned objects into local, environment-friendly materials resulted in attempts towards forming stable compositions of clay and mining waste, while piggybacking industrial manufacturing lines. Kishor Bricks is a traditional clay brick manufacturing facility, located on the outskirts of KGF. As the teenage son of the owner spoke fluent English, we were able to form a deal in which I was taught how to mix, mold, and burn local clay with obtained mining waste composite on each brick production cycle. Our agreement was that in case the process would turn successful, the son will learn how to open their production line to artistic collaborations, using 3D printed molds.

I was trying to imitate their own approach for brick mold design and casting procedures, using rigid 3D printed negatives. Even with vacuum release holes and non-stick agents such as talcum powder, this technic proved to be unreliable. Secondly, Due to many miscommunications and failures of the factory workers to treat the fragile small casts differently from the massive bricks, this collaboration became very problematic, resulting in very few successful castings. Furthermore, the heat emitted by the 24-hour wood-based oven proved to be too weak to cure and rigidify clay-mining waste composites.



Figure 17 left: gathered mining-waste mixture; center: rigid press mold for clay casting; right: clay casts before curing at Kishor Bricks



Figure 18 Kishor Bricks Oven-compound; right: cured mining-waste and clay mixture cast

5.2.5. Clay casting with G.M.

The second collaboration around clay casting comprised of using contemporary pottery facilities to examine the potential of this process in an ideal environment. Claystation is a Bengaluru based pottery workshop that operates as an accelerator for pottery entrepreneurs, focusing on research and implementation of locally sourced clay and glazing materials. Due to the experimental yet thorough paradigms maintained by the owner, we managed to produce consistent and well-documented samples. This time I have used silicon press molds to create impressions of the 3D prints and porcelain clay supplied by the workshop as the mining waste bonding agent as casting material composite. The various casting procedures have achieved durable and beautifully detailed surfaces with up to 35% mining waste mixture. Our tests also revealed that using the mining tailings as glazing material produced a durable textured surface that can be used in anti-slip tile production. The graph below shows the calculations taken in assuring the successful glazing process. Additionally, we conducted some assessments in firing porcelain glaze samples under different temperatures to promote a color response from the metallic particles found in the mining waste, ranging from cone 10 to cone 12. Initial tests did not show any significant color change of the metallic particles. Finally, since Claystation aims to promote grassroots entrepreneurship, Ganesh was willing to build a business plan for any KGF resident that would be interested in leveraging the material research results into a business opportunity.

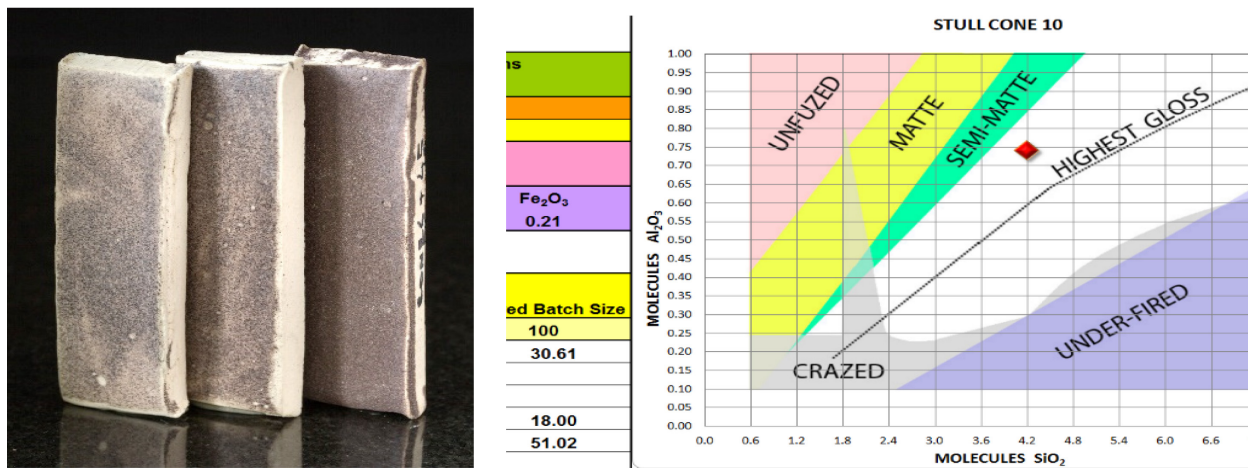


Figure 19 left: Glazing tile samples; right: Feasibility Graph showing mining waste glazing composite potential

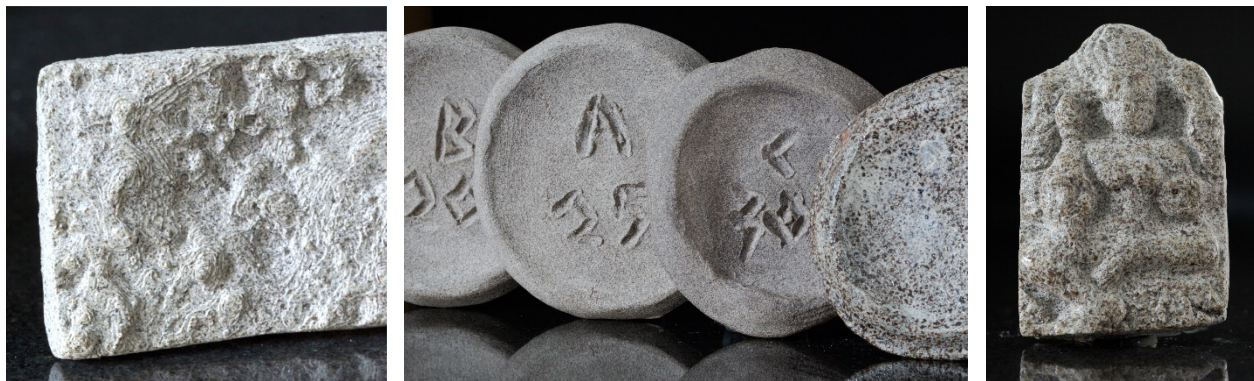


Figure 20 Various mixtures of mining-waste and porcelain castings at Claystation

5.2.6. The community writes back

Before leaving KGF one, my collaborators presented me with unique souvenirs as a memory of our shared fieldwork and a personal reflection on my project through the moving image and the written word. Dr. S.B is a radiographer and a social activist who passionately manages printed and digital media channels in his spare time. As a son of a mine worker and union leader, S.B regularly maintains free medical camps and other social initiatives for retired miners, in ambition to support the struggle of the oppressed. Throughout our time together, S.B was eager to make sure I receive any piece of information needed about the socio-economic, cultural, and medical struggles of the Dalit miners, using my research as a channel to gain another for their narrative within international archives. The reflections made by S.B expose not only the well-justified thirst amongst KGF inhabitants for worldwide recognition but also marks the position he wishes to place my account in relation to his own historical narrative of KGF.

“Mr. L.: That's why you are brought to KGF, you Columbus to KGF (Columbus black American).”

Mr. Roe Cohen: I am Columbus for already having information by myself.” (S.B., 2019, p. 7)

The book *Roe Cohen in Kolar Gold Fields* was authored and printed, especially for me, entangles documentation of our meetings within a historical narrative provided by S.B. The opening section lays a detailed transcript of an interview produced by S.B, in which S. L. interviewed me about the project. After a short introduction of the project, L. is quoted for challenging me in stating that I was sent to KGF as Columbus to explore and discover it for the world (read Christopher Columbus, the Italian explorer, and colonizer). Although initially I have answered was that my take on Columbus is to use ways of exploration to create a space for locally written narratives, the transcript by S.B states that Columbus was a black American and that I represent information that I already hold of. This misquotation in translation (Scholl, 2008) does not necessarily imply how S.B reads my agency, but it might suggest of how altruistic intentions from both sides may not lead to a mutual understanding of the situated relationship. Further reading of the book may suggest on

“recently, one of the researchers from Israel, Mr. Roe Cohen, was given a very brief explanation of the Cyanide dumps as I had given a clear view with Drone Camera,(Flight Camera), for his information and this has been in a three-dimension, for his record. And a future record of KGF would come out and also would be preserved by this information.” (S.B., 2019, p. 14)

Laying a historical timeline of events that shaped the history of KGF, S.B (S.B., 2019) incorporates our shared experiences of producing drone footages in important historical sites as an integral part of his own narrative. Although this writing is mostly a personal gesture of goodwill, a newspaper article published by S.B (2019) publicly supports the suggestion that his own souvenirs serve as a foundation for expanding the reach of indigenous narratives. S.B wishes to gain worldwide exposure for the oppressed community, both writing in English and citing our shared experience as a *discontinuity* (Rancière, 2010) of previous conceptions maintained by the local community and my own lens.

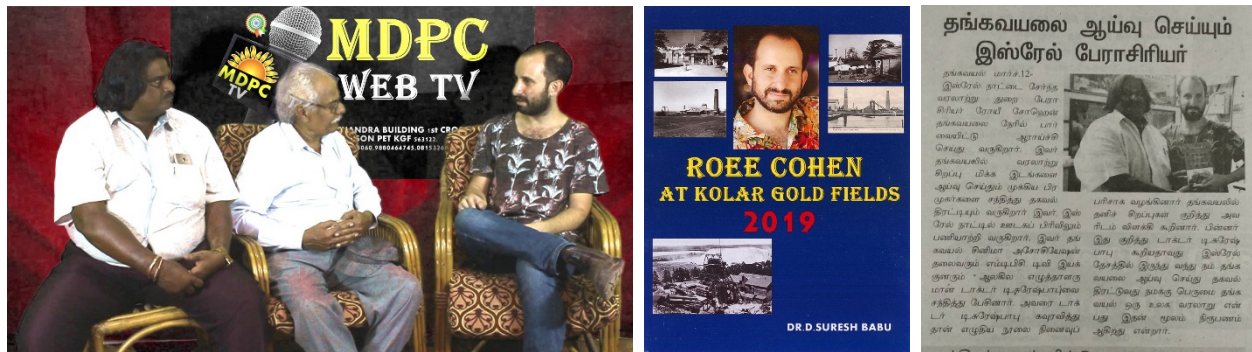


Figure 21 left: Interview with S.B and S.L (March 2019); Roee Cohen at Kolar Gold Fields book cover; right: Mention of the meeting with S.B in a local newspaper (March 2019)

5.3. Reflections and Omissions

This chapter characterized the essence of the encounters between the community and myself through the type of colluding knowledge, initial motivations of each actor, and ownership of the initiative (Kiljunen & Hannula, 2002, p. 68). The first iteration of the project failed since it laid on the subversion of the tourist gaze into a commodified experience. This approach had taken the narratives of the community as a *material* (Kaitavuori, 2018) while accommodating them into the western commercial and theoretical frameworks (Weeden, 2002). Separation of one sense from another (Rancière, 2010) distanced the works from a complete correlation to the theoretical underpinning I laid through the first chapters but gained more opportunities for collaboration with mutual benefits. Through each encounter, the unexpected results thicken the condition of uncertainty that allows us to maintain the gap and operate in-between each actor's agency and the applied technology.

The encounter with S. L. proves that leaving the choice and control of the capturing device to another *actant* resulted in a volume that documented misconceptions and collusions within the community that I could never realize by myself. Further lack of control disturbs the freedom of the gaze (Ashcroft, 2009), and portray the struggle of I maintain in separating my original signification of the event from experience (Scholl, 2008). In materializing this uncertainty in adaptation to local metal casting skills, further missing information (Steyerl, 2012) was accumulated into a space of limitations in translation. In this regard, the first iteration of the project relayed heavily on skills I have acquired earlier (i.e., Silicon mold making and polyester casting) and tried to transfer to local artisans who eventually declined due to the high costs of raw materials. Here again, instead of separating and operating in-between knowledge paradigms (Bhabha, 2012; Hertz, 2012b; Sayers, 2018), the one was to be enforced on another within the network. Finally, acting within the capitalist prism of the travel across different modalities allowed the accumulation of knowledge that would intensify collisions and misconceptions with collaborators from an indigenous community. Simultaneously imposing and letting go of complete control of a situation and engagement within intimate conversations is slow, and counterproductive. Unexpected results through the reflexivity of agentive tourism (Smith, 2013) accommodate both the struggle of the post-tourist between home and destination (Scholl, 2008; Urry, 2002) and the social struggle of the collaborators to claim economical and cultural justice for their community. The souvenir from these barter exchanges accommodates both struggles (Appadurai, 1988) as a tourist-object (Lury, 2002) that encapsulates the eventuated

discontinuity within a physical matter that further intensifies uncertainties by rejecting and tracing (Bataille, 1985) them through its chemical characteristics (Gabrys et al., 2013).

The unrationalized passion I hold towards reproducing our collusions through plastic extrusion is accommodated within the pleasure my collaborators and myself gain from sharing time together. George Bataille (Bataille & Hurley, 1988) is brought up again here as he insists on continuous disturbance of the need of commonality amongst humans against the utilitarian approach of capitalism, which calculates production and consumption into value accumulation. Collective rituals that sacralize and mythicize the social bonding itself position themselves as irrational production of waste – emotionally and spontaneously conspiring against the capitalist notion of production by wasting time and energy that could be used for growth. The otherness of the collaborators is then defined as radical uncertainty that insists on abandoning the dichotomizing lens that classifies actors to roles within consumption and production – letting go of complete control and passionately accepting the dissolution of a fixed identity (Jantzen, 2017). The loss of the ability to repeatedly create a coherent reciprocal relationship between consumption and production and the unmaking of rational, productive decisions through slips and uncertainty of situations signifies excess as the return of passion. This passion acts against the initial economic position of the traveler as a contributing member of value accumulation to the global economy society.

5.3.1 Omissions

Within the limited scope of the thesis, I have omitted several topics that examine the political potential of reclaimed post-industrial nature by the oppressed community. Focus on the essence of the collaboration itself discarded site-specific issues, such as the socio-environmental relationship between value and waste, towards the resistance to a passive role within the global economy. Furthermore, platforms for archival and distribution of the artifacts did not materialize during the project. These would, in turn, raise questions of ownership and control of the original digital objects.

Initially, the project aimed for the establishment of a locally controlled archive of the point-cloud data attained within the collaborations, as practices of globally hosted and accessed digitalization proved problematic. Although the Developments in the institutionalized relations to indigenous knowledge have promised active involvement in local communities in the decision making since the 1970s, within the preservation efforts of world heritage sites. Trans-national bodies such as the UN positions globalization as progressive and inclusive, seeing the previously othered natives as indigenous communities who are deprived of their geographically bounded cultural assets. However, this approach has been approved by only several countries (2017). The problematic situation in which global bodies define the state of marginalization materializes in the field of heritage digitalization, in which private and national initiatives potentially exploit the void by controlling the intellectual property of the scans. In the case of the Roman triumphal arch in Palmyra, a British institution created a replica of a monument that was destroyed by ISIS (Thompson, 2018). The press hailed it for proving technological progress as a savior, while the west just regained control of previously colonized assets that have disappeared due rise of a force that emerged within the chaos of western military involvement in Iraq. Secondly, even the promise of open-knowledge platforms may slip into neu-colonial practices. *Open heritage* is a project maintained by Google Arts & Culture with CyArk to digitize and distribute heritage artifacts on the Google Cloud Platform. Although instructors taught local collaborators how to manage the process themselves, the point-cloud data is available for download from the Google platform, and the control of commercial usage is maintained by

the initiative. This situation places positively precepted terms as *open-knowledge* and *shared* heritage as vessels for potential recapitulation of colonial museum practices (Shein, 2018). Thus, future development of the methods maintained in the project may focus on ways to create an archive that reflects further delegation of responsibilities to the community rather than maintaining shared or universal ownership of the narrative.

The economy of value produces waste as a passive and invisible by-product, waiting for another process of capital accumulation in the future (Appadurai, 2012). With the awareness, the post-industrial effects on the environment, accumulation of the capital that was previously achieved by the extraction of raw materials from the earth nowadays asserts value to the conservation of nature (Escobar, 1996). Recapitalizing waste through sustainable paradigms may delegate power to indigenous communities as long as they do not challenge the western dominance of the globalized economy (Lindroth & Sinevaara-Niskanen, 2017). Coming from the Pariah caste, which destined them to deal mostly with waste disposal, the KGF miners are situated nowadays in an invisible place that is topographically hidden behind by the polluting by-product of the gold mining industry. The post-extractive landscape of KGF is already being capitalized by the Kannada film industry in the production of a highly successful film series, in which the exploited miners' history is reduced to an act of bravery of a fictional hero (Ayyalusamy, 2019). Secondly, the land-use of KGF is designated as a wasteland by the state of Karnataka, holding the passive potential for re-accumulation of its value by another capital. The state had previously planned to bury nuclear waste in the defunct mining shafts, following by plans to decongest the urban Bengaluru by revaluating passively rural KGF (Srinivasan, 2018). Against the capitalist making and re-making of nature and through locally based research of nature recapitalization by specific ecological relations between the community and the post-extractive matter economic viability upcycled mining waste may provide an opportunity for self-determination. Non-hegemonic usage of 3D printing and imaging technologies within upcycling of the mining waste may come as an act to instate an active role for the ex-miners in conserving their own heritage by locally inscribed sustainable ecology. Further research through concepts of *post-development* and community-initiated place-based ecology (Escobar, 2011; Radcliffe, 2007) may hold the potentiality in increasing community interest in such initiative.



Figure 22 Souvenir by S.B - KGF drone footage accompanied by Israeli pop background music (2019)

6. Conclusion

This thesis had illustrated how the well-intentioned traveler ended up fixating and intensifying his own cultural position rather than helping to disturb the norm in which technology is maintaining social oppression of an ethnic minority in Kolar Gold Fields. However, placing events of knowledge barter in-between narratives and ways of doing had essentialized a form of communication in which collaborators could evaluate the benefits of contemporary surveying and prototyping technology in their own terms.

Working separately with different narrators and craftsmen/interpreters allowed exposure of the varied historical perspectives held by the inhabitants of Kolar Gold Fields without politicizing dominance of some on top of the others. The tourist was also functioning as a junction that assembled initial connections between local craftsmen and narrators, preparing the ground for potential future collaborations.

Lastly, the utilization of specific technologies within the dialogues was essential, mostly to the tourist. Both in interviews and recorded conversations (Cohen, 2019a, 2019b; S.B., 2019), the collaborators saw the results more as memory and private research of the tourist than a concrete political statement. The rather anticlimactic results of this process situate it in a somewhat less pretentious position that asks to listen and share an experience more than to enforce aesthetics on a struggle that the facilitator may never completely comprehend.

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Endnotes

ⁱ Dérive is an essential research tool within Situationist discipline of *psychogeography*, made to understand the effects of a certain environment on behaviors of individuals, opposing modernist normalization of behavior. The idea is to break disciplining patterns of modern life through walking in paths that are not predetermined by architectural constructions or other homogenizing governors of human behavior (Bishop, 2012, p. 81).

ⁱⁱ Dalits are considered as the lowest castes in the Hindu tradition, nowadays performing the roles of basic servants, typically unable to climb the hierarchy ladder into higher judiciary such as law practice or industry management positions. Originally defined as the "untouchables", they were excluded from education and religion, not allowed to pray in temples. They were mostly bearing the most humiliating jobs, such as toilet maintenance and laundry cleaning. While writing the constitution for newly independent India Dr. B.R. Ambedkar has defined them as "scheduled castes", aiming to change their fate, dictating laws that would undermine the three millennia long severe discrimination (Ghose, 2003).

ⁱⁱⁱ MAN MADE MOUNTAINS

(Cyanide Dump)

World Poetry 2001

The Mountains of our enriched land

Is a monument that does hold

A history which was partly told

And only we could understand

Created by our risking hand

From time forgotten, of the old,

It's a part of our purest gold

An object softer than white sand.

With wrinkles all o'er top to dale

(Furrows dug by wind and rain)

Grey Mount! My heart to thee does hail

And shall hail thee time and again.

Stately crowned by eucalyptus trees

Where golden gale does softly breeze.

S.A.Hazen (S. A. Hazen, personal communication, March 11, 2018)